SUPPLEMENT No. 2,

1914,

RELATING TO

MEDITERRANEAN PILOT, VOL. III.

FOURTH EDITION,

1908.

(CORRECTED TO 14TH AUGUST, 1914.)

PUBLISHED BY ORDER OF THE LORDS COMMISSIONERS OF THE ADMIRALTY.

LONDON:
PRINTED FOR THE HYDROGRAPHIC OFFICE, ADMIRALTY,
UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE,
BY TAYLOR, GARNETT, EVANS, & CO., LTD.,
ALSO AT MANCHESTER AND REDDISH;
AND MAY BE OBTAINED FROM
J. D. POTTER, AGENT FOR THE SALE OF ADMIRALTY CHARTS,
145, MINORIES, E.C.

1914.

Gratis to Purchasers of Mediterranean Pilot, Vol. III.

CAUTION WHEN APPROACHING BRITISH PORTS.

(To be inserted inside cover of all Sailing Directions.)

PART I.—CLOSING OF PORTS.

(1) My Lords Commissioners of the Admiralty, having taken into consideration the fact that circumstances may arise in which it may be necessary, on account of periodical exercises, manœuvres, or otherwise, to forbid all entrance to certain ports of the Empire, this is to give Notice that on approaching the shores of the United Kingdom, or any port of the British Empire, a sharp lookout should be kept for the signals described in the following paragraph, and for the vessels mentioned in paragraph (2), Part II., of this Notice, and the distinguishing and other signals made by them. In the event of such signals being displayed, the port should be approached with great caution, as it may be apprehended that obstructions may exist.

(2) If entrance to a port is prohibited, three *red* vertical lights by night, or three *red* vertical balls by day, will be exhibited in some conspicuous position in or near to its approach, which signals will also be shown by the vessels indicated in paragraph (2), Part II., of this Notice.

If these signals are displayed, vessels must either proceed to the position marked "Examination Anchorage" on the Admiralty Charts and anchor there, or keep the sea.

PART II.—EXAMINATION SERVICE.

(1) Under certain circumstances, it may become necessary to take special measures to examine vessels desiring to enter the ports or localities at home or abroad, referred to in Notices to Mariners No. 1 of 1914 and subsequent years.

(2) In such case, vessels carrying the distinguishing flags or lights mentioned in paragraph (4) will be charged with the duty of examining ships which desire to enter the ports and of allotting positions in which they shall anchor. If Government vessels, or vessels belonging to the local port authority, are found patrolling in the offing, merchant vessels are advised to communicate with such vessels with a view to obtaining information as to the course on which they should approach the Examination Anchorage. Such communication will not be necessary in cases where the pilot on board has already received this information from the local authorities.

(3) As the institution of the Examination Service at any port will never be publicly advertised, especial care should be taken in approaching the ports, by day or night, to keep a sharp lookout for any vessel carrying the flags or lights mentioned in paragraph (4), and to be ready to "bring to" at once when hailed by her or warned by the firing of a gun or sound rocket.

In entering by night serious delay and risk will be avoided if 4 efficient all round lamps, 2 *red* and 2 *white*, are kept available for use.

(4) By day the distinguishing flags of the Examination Steamer will be a special flag (white and red horizontal surrounded by a blue border) and a blue ensign.

Also, three *red* vertical balls if the port is closed.

By night the steamer will carry: (*a*) Three *red* vertical lights if the port is closed; (*b*) three *white* vertical lights if the port is open.

The above lights will be carried in addition to the ordinary navigation lights, and will show an unbroken light around the horizon.

(5) Masters are warned that, before attempting to enter any of these ports when the Examination Service is in force, they must in their own interests strictly obey all instructions as to entry given to them by the Examination Steamer. In the absence of any instructions from the Examination Steamer they must proceed to the position marked "Examination Anchorage" on the Admiralty Charts, and anchor there, or keep the sea.

Whilst at anchor in the Examination Anchorage, Masters are warned that they must not lower any boats (except to avoid accident), communicate with the shore, work cables, move the ship, or permit anyone to leave the ship, without permission from the Examination Steamer.

(6) In case of fog, Masters of vessels are enjoined to use the utmost care, and the Examination Anchorage itself should be approached with caution.

(7) The pilots attached to the ports will be acquainted with the regulations to be followed.

(3802) Wt. 36065/426 (1) 35,000.—1/14. T.G.E

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Gratis to Purchasers of Mediterranean Pilot, Vol. III.

ADVERTISEMENT TO THE SUPPLEMENT, No. 2.

This Supplement, No. 2, compiled by Commander H. S. Penn, R.N., contains all the information received in the Hydrographic Department of the Admiralty relating to the Mediterranean Pilot, Vol. III., Fourth Edition, since its publication in 1908, and is derived from the Reports by Officers of His Majesty's Navy and Foreign Governments, and various other sources.

The principal dimensions of all dry docks, patent slips, &c., the available depths into the principal ports, and the places suitable for magnetic observations, included in Mediterranean Pilot, Vol. III., have been inserted as Appendices.

Supplement, 1911, and all Notices to Mariners relating to the above work, up to and including No. 1,368, of 1914, are hereby cancelled.

H. E. P.-C.

Hydrographic Department,
Admiralty, London,
27th August, 1914.

(7528) Wt. 20004/108 (71). 3,000—9/14. T.G.E.

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Supplement, 1911, and all Notices to Mariners relating to the above work, up to and including No. 1,067, of 1914, are hereby cancelled.

H. E. P.-C.

Hydrographic Department,
Admiralty, London,
27th January, 1914.

(7187) Wt. 30001—105 (17). 3,000—5/14. T.C.L.

For details of sectors and the latest information respecting the Lights which are included in this work, seamen should consult the Admiralty List of Lights, Part V. This List is published early in every year, corrected to the preceding 31st December.

The existence of this Supplement is to be entered on the opening page of the Mediterranean Pilot, Vol. III. The information is to be carefully considered.

One copy is to be retained intact for reference, notations referring to it being made in the pages of the Mediterranean Pilot, Vol. III.; the other copy may be cut up, if considered desirable, the slips being pasted in the volume at the appropriate place.

SUPPLEMENT No. 2,

1914,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. III.

FOURTH EDITION,

1908.

The several paragraphs follow the order of the paging of the Mediterranean Pilot, Vol. III.; the pages referred to are given herein in the text.

(*All bearings are Magnetic.*)

Page iii.—Advertisement.—First paragraph: *For* "Mediterranean Pilot, Vol. IV.," *read* "Mediterranean Pilot, Vol. III."

Page xxi.—General navigation.—*Add* new section 15:—

15. *Concise Rules for Revolving Storms*:—

1. Revolving storms are so named because the wind in these storms revolves round an area of low pressure situated in the centre. They have also local names, and are termed hurricanes in the West Indies and South Pacific ocean; cyclones in the Indian ocean, Bay of Bengal, and Arabian sea; and typhoons in the China sea.

2. In these storms the wind always revolves the same way in the same part of the world, that is, against the movement of the hands of a watch in the northern hemisphere, and with the hands of a watch in the southern hemisphere. The wind does not revolve in circles, but has a spiral movement, inwards, towards the centre.

Page xxi. *continued.*

3. Revolving storms have also, as a general rule, a progressive movement. Within the tropics they usually move from east to west at first, and then curve towards the pole of the hemisphere in which the storm is generated, and afterwards move from west to east.

4. The track which the centre of the storm takes is called the path of the storm, and the portion of the storm-field on the right of the path is known as the right-hand semicircle, and that on the left as the left-hand semicircle of the storm.

5. In the right-hand semicircle, if the observer be stationary, the wind will always shift to the right, and in the left-hand semicircle to the left. This law holds good in both hemispheres.

6. If a vessel be so situated in a storm that running before the wind the path of the advancing storm will be crossed, this is considered to be the dangerous semicircle. This will always be the right-hand semicircle in the northern hemisphere, and the left-hand in the southern.

7. These storms are most frequent in the northern hemisphere from July to November, and in the southern hemisphere from December to May. In the Bay of Bengal and Arabian sea they, however, occur most frequently about the time of the change of the monsoon.

8. The area over which revolving storms have been known to extend varies in diameter from 20 miles to some hundreds of miles, and their rate of movement in the West Indies averages about 300 miles a day; in the China sea, Bay of Bengal, and Arabian sea about 200 miles a day; and in the Indian ocean from 0 to 200 miles a day, the more stationary storms occurring at the beginning and end of the hurricane season.

9. The indications of the approach of a revolving storm are (1) an unsteady barometer, or even a cessation in the diurnal range, which is constant in settled weather; (2) a heavy swell not caused by the wind then blowing; (3) an ugly, threatening appearance of the sky.

10. In order to judge what is the best way to act if there is reason to believe a storm is approaching, the seaman requires to know (*a*) in which direction the centre of the storm is situated, (*b*) in which semicircle the ship is situated.

11. As these points cannot be determined if a vessel is moving with any speed through the water, the first proceeding should be to "stop" or "heave to," and, as it is always best to assume, at first, that the vessel may be in the dangerous semicircle, she should be hove to on the starboard tack in the northern hemisphere, and on the port tack in the southern.

12. If an observer faces the wind the centre of the storm will be from 12 to 8 points on his right hand in the northern hemisphere, and on his left hand in the southern hemisphere; 12 points when the storm begins; about 10 points when the barometer has fallen three-tenths

Page xxi. *continued.*

of an inch, and about 8 points when it has fallen six-tenths of an inch or upwards.

13. If the wind shifts to the right the vessel is in the right-hand semicircle, if to the left in the left-hand semicircle, and, if the wind is steady in direction, but increasing in force, she is in the direct path of the storm.

14. If the seaman has reason to think that his vessel is in the direct path of the storm he should run with the wind on the starboard quarter in the northern, and on the port quarter in the southern, hemisphere until the barometer has ceased falling. If she is in the right-hand semicircle in the northern hemisphere she should remain hove to on the starboard tack, but if in the southern hemisphere run with the wind on the port quarter; if she is in the left-hand semicircle in the northern hemisphere she should run with the wind on the starboard quarter, but if in the southern hemisphere remain hove to on the port tack.

15. Should a vessel not have sufficient room to run when in the least dangerous semicircle, she should heave to on the port tack in the northern, and on the starboard tack in the southern, hemisphere.

16. If in a harbour, or at anchor, the seaman should be just as careful in watching the shifting of the wind and ascertaining the direction of the centre, as by so doing he will be able to tell on which side of the path of the storm he is situated, and be able to act according to circumstances.

17. Should the centre of a storm pass over a vessel, the wind, after blowing furiously in one direction, ceases for a time, and then blows with equal fury from the opposite direction. This makes a confused pyramidal sea, which is especially dangerous.

CHAPTER I.

Page 9.—*Cancel* "**Regulations for anchorage** of foreign vessels in Italian ports," and *substitute*:—

Italian ports.—Regulations.— (A) The following regulations for foreign vessels of war anchoring in Italian ports have been issued by the Italian Government.

1. Foreign vessels of war cannot remain at fortified ports for a period of more than eight days, and not more than three vessels of the same flag may assemble at these anchorages, unless formal permission, which must be applied for through a diplomatic channel, has been received.

2. Venice, and the anchorage in the lagoons, is the only fortified

Page 9 continued.

Italian naval station in the area included in this volume, and it, as well as Ancona, together with any anchorage where an Italian man-of-war, capable of returning salutes, is lying, is to be saluted by foreign vessels of war which are in a position to do so.

3. Foreign vessels of war anchored in any of the above-mentioned places must leave at any time if requested, and at the expiration of the period stated in Article I.

4. The naval authorities will probably send an officer to point out the anchorage assigned to the vessel, but in the event of this not being done anchorage may be taken up as convenient.

5. Should pratique be refused, the medical officer of the vessel should be sent to the Local Sanitary Office to ascertain the treatment to which the vessel or vessels are to be subjected, and all Port Regulations must be carried out.

6. No surveying or hydrographic operations are to be carried on without special permission from the Government, and the following are also forbidden within the territorial waters: (*a*) The execution of a death sentence. (*b*) Vessels carrying on hostilities with each other, or bringing prizes or searching vessels. (*c*) Landing to execute manœuvres on, or gun practice within gun range from the coasts, without special permission.

7. With the exception of officers and petty officers the crew of a foreign vessel must always land unarmed, and should it be wished to send an armed funeral party, permission must be obtained.

(B) The following regulations are to be observed in time of war:—

(1) Every vessel approaching a fortified harbour by day must hoist her national flag before coming within range of artillery fire, and must remain outside the range of the guns of the ports whilst signals are exchanged, and until permission to enter the port is granted.

The failure to comply with this regulation will cause first blank cartridge, and afterwards shot, if necessary, to be fired at the vessel from the nearest fort.

No vessel may enter a fortified harbour at night.

(2) The movement of boats, belonging to neutral vessels of war, within the area of fortified harbours, is absolutely prohibited, both by day and by night, but vessels anchored in the harbours may communicate with the shore during the day in accordance with rules laid down by the Commandants, and in cases of urgency a boat, belonging to the fortress, may be obtained to communicate at night, by signalling the request. Any other signalling is strictly forbidden.

(3) Vessels wishing to anchor in any of the naval or fortified ports of Italy, a list of those included in this work and of their signal stations being given below, must not approach such ports within a distance of 5 miles, and must ask permission by means of hoisting, in addition to the name of the vessel, the International pilot signal,

Page 9 continued.

or the International code signal P.D., "Permission is urgently requested to enter harbour."

Port or Anchorage.	Signal Stations with which vessels must communicate.
Ancona - - - - - -	Monte Cappuccini.
Port Nuovo - - - - -	,, ,,
Brindisi - - - - - -	Fort Mare.
Port Corsini - - - - -	Port Corsini.
Port Chioggia - - - - -	Sottomarina.
Venice and approaches - - -	Pilot tower, San Nicolo di Lido.

Whenever a naval harbour is to be put in a condition of war, the Commandant of the same, whenever occasion requires it, may order all vessels of war and merchant vessels, which may be anchored in the defence zone, to leave or proceed to those other points which he may find convenient to assign them. Vessels receiving such sailing orders must proceed outside the artillery firing line within 12 hours from the time such orders are conveyed on board them.

All possible facilities, subordinate to the requirements of the naval harbour, are offered to those vessels not in a position to sail within the stated time.

In carrying out these orders the Commandant may have recourse to any means that necessity or urgency may justify.

Pilots.—Italy.—Pilot boats are painted black with a white stripe, and the word "Pilota" in white on bows and stern, with, in the case of a sailing boat, the letter "P." on each sail, and in a steamer on each side of her funnel. They also carry, in day time, a square flag—blue, white, blue, horizontally.

Vessels requiring pilots by day should either

(*a*) Hoist the national flag on a white ground;

(*b*) Make the signal P.T.; or

(*c*) Hoist flag S.

And by night

(*a*) Burn a blue light; or

(*b*) Show a white light occulted at short intervals.

Pilots are forbidden to take vessels in tow.

Italian coasts.—Submarine vessels.—Submarine vessels, when practising submerged, are always escorted by a vessel, usually a torpedo boat, carrying a red square flag at the masthead.

Vessels sighting this escort-vessel must keep a lookout for International code signals which she may hoist to indicate that manœuvres are in progress, in order that they may avoid the risk of collision with a submarine vessel. In case of urgency this signal may be accompanied by firing a gun.

Page 9 continued.

It is also necessary to observe carefully the surface of the sea, as the presence of a submarine vessel is often indicated by the end of the periscope emerging a foot or two above the surface. In ordinary practices the periscope is surmounted by a staff 10 feet in height with a small triangular metal flag.

Submarine vessels practise daily off the coast of Italy in the approaches to Venice. The semaphores near the area in which the submarines practise here hoist a square red flag during its continuance.

Austria-Hungary.—Submarine vessels.—When submarine vessels are practising off the coasts of Austria-Hungary, an escort vessel, carrying a red square flag at the fore topmast head, is stationed in their vicinity.

This escort vessel should be passed by other vessels at a distance of at least one mile; should it be impossible to keep outside this distance, vessels approaching must proceed at slow speed until again a mile distant from the escort vessel, keeping a good lookout, and immediately obeying any signals made by her.

Submarine vessels are frequently practising in the Gulf of Quarnero, off the west coast of Istria, and particularly in the vicinity of Pola.

Regulation.—Dredgers and other craft engaged in works in harbours, or in much frequented waters, on the coasts of Austria-Hungary, where liable to be affected by the wash of passing steam vessels, carry the International code signal M.F., and all steam vessels in the vicinity must reduce their speed, so as to avoid damage or disturbance of the work. Infringements of this order are punishable with fines up to 200 kronen, or 14 days' arrest, besides paying compensation for any damage occasioned.

Austrian ports.—Regulation.—All merchant vessels must fly their national ensigns from sunrise to sunset when in Austrian and Hungarian territorial waters, except when in the following localities, where this regulation is only enforced on entering a harbour:—

On the coast of the mainland from Grado to Parenzo, and from Nera point to Zara Vecchia, also from Trau to Molonta; on the coasts of Veglia island and of that part of Cherso situated northward of Cherso village, also on the coasts of all islands southward of Murvica island; in Zara channel southward of the line Melada-Nona.

AUSTRIAN PORTS.—Harbour regulations.—Every merchant vessel entering a port by day must hoist her national flag and keep it flying until the completion of the Sanitary and Port official inspection.

The prescribed regulations for lights at night must be observed.

Vessels are not permitted to anchor at the entrance to the port, except in cases of *force majeure*.

Page 9 continued.

Upon arrival, no communication is permitted with the shore or other vessels until pratique has been received, unless the circumstances and conditions come under the list of exceptions laid down in the Port and Sanitary regulations. Where no such exceptional circumstances prevail, the captain of a vessel must, immediately on arrival, report himself to the Port authority, subject to having passed the sanitary examination.

The captains of vessels having inflammable or explosive materials on board must report the fact.

An anchorage or berth is allotted to a vessel after she has passed the Sanitary authorities, and the captain may not move or shift from the place assigned without permission. Vessels ordered by the Port authorities to leave their berths must immediately comply.

A vessel, moored within the limits of a harbour, must allow another vessel to lie alongside, if so ordered by the Port authorities. In specialised ports, square-rigged vessels or steam vessels must not moor or unmoor, make fast, or move, without the services of a local pilot.

Obedience to the Port authorities is compulsory in all matters relative to sanitary and general conditions.

Vessels secured to buoys must have out as much cable as the force of the wind requires; and in stormy weather not less than 17 fathoms.

In heavy weather, a spring must not be taken to any buoy to which another vessel is moored.

Vessels moored to stakes and pillars without rings must take several turns with the hawser round the same, and the method of mooring are to be such as the local circumstances and the Port authorities' regulations require.

Any spring hawser must be let go when a vessel is passing.

Vessels which has not the requisite facilities for mooring will not be allotted a place alongside the quays.

Jib-booms and flying jib-booms must be rigged in, and yards braced up or topped, when so ordered by the Port authorities. Hawsers must not be taken to any places not intended for that purpose, and no obstructions may be caused by cables, hawsers, &c.

If a vessel has parted from, or is dragging her mooring, or if a vessel is being launched, vessels in her vicinity must temporarily move out of the way.

Naked lights are forbidden on board vessels lying in tiers alongside quays or canals, and permission must be obtained to light a fire in the hold for the purpose of fumigation.

Lading or unlading explosives or inflammables must be carried out under the regulations regarding the same, and during these operations, smoking on board the vessel, or in her immediate vicinity on shore, is prohibited.

Page 9 continued.

Vessels, with stores of gunpowder and arms on board for their own use, proceed to the places reserved for such vessels before going alongside the quays; these stores must be placed where authorised, and can only be taken on board again after the vessel has left the wharves and is about to sail.

Cargoes must be discharged or taken on board with all possible speed, and may not remain on the wharves at night, except in unusual circumstances, when the consent of the Port authorities may be obtained, subject to the Custom's regulations.

Should a vessel, when in the vicinity of the harbour, lose anything overboard, and be unable to recover it, she must immediately report the loss, in order to obtain permission for the necessary salvage operations, or to secure the services of the Port authorities.

The captain of a vessel must give 24 hours notice of his intended sailing, and report as to the dismissal or absence without leave of any of his crew.

Page 10.—STORM SIGNALS.—*Cancel* paragraphs 1, 2, and 3, and last line of section, and *substitute*:—

Day signal.	Night signal.	Signification.
A cone, point upwards	A *red* light over two *white* lights, vertical.	Gale probable, commencing from north-west.
Two cones, vertical, points upwards.	Ditto	Gale probable, commencing from north-east.
Two cones, vertical, points downwards.	Two *white* lights over a *red* light, vertical.	Gale probable, commencing from south-east.
A cone, point downwards	Ditto	Gale probable, commencing from south-west.
Two cones, vertical, bases together.	A *red* light between two *white* lights, vertical.	Gale probable, direction of wind uncertain.

Wireless telegraph weather reports.—The wireless telegraph stations on the coasts of Austria-Hungary, which are open to the public, send out weather reports in the following manner:—

The R. and I. Maritime observatory at Trieste composes daily, including Sundays and festival days, a meteorological telegram of 20 words. This contains information as to the weather of Trieste, Porer, Fiume, Lissa, Ostro point, Venice, Brindisi, Palermo, Corfu, and Alexandria, at 7h. a.m. in two groups each of five figures, which indicate, as shown below, the height of the barometer, the direction and force of the wind, amount of cloud, &c., temperature, and state of the sea. These meteorological telegrams are transmitted at 9h. a.m. to the coast stations of Castelnuovo, Sebenico, and Trieste, and are forwarded by these stations during the next 24 hours to vessels which are in wireless telegraphic communication with them and desire the telegrams, unaltered. No deciphering is made at the coast stations. A coastal fee of 4 kroner is charged against the vessel called up.

Page 10 continued.

The first three figures in the first group give the height of the barometer at 0° C. and at the sea level; the number 700 being omitted, 745·8 mm. is expressed by 458, and 776·3 mm. by 763.

The last two figures in the first group give the direction of the wind, thus:—02 = N.N.E., 04 = N.E., 06 = E.N.E., 08 = East, 10 = E.S.E., 12 = S.E., 14 = S.S.E., 16 = South, 18 = S.S.W., 20 = S.W., 22 = W.S.W., 24 = West, 26 = W.N.W., 28 = N.W., 30 = N.N.W., 32 = North.

Calm is expressed by 00.

The first figure of the second group gives the force of the wind, calm = 0, thence increasing to 10.

The second figure of the second group shows thus: 0 = clear, 1 = quarter overcast, 2 = half overcast, 3 = three-quarters overcast, 4 = entirely overcast, 5 = rain, 6 = snow, 7 = mist, 8 = fog, 9 = storm.

The third and fourth figures of the second group give the temperature of the air by the Celsius scale. When the temperature is below 10°, the first figure will be 0, thus: 09 = 9°. Negative temperatures have 50 added to them, thus: 56 = −6°, 61 = −11°.

The fifth figure of the second group gives the state of the sea, from 0 = calm to 9 = very heavy sea.

Example of a weather report, 11th November, 1913:—

64700	08130
64116	44164
64716	14144
66412	31173
63332	12153
65632	14100
65216	34183
00020	28131
67000	00130
66828	32191

which, deciphered by the system given above, means:—

Place.	Barometer.	Wind.	F'ce.	Cloud, &c.	Temperature	State of Sea.
Trieste -	764·7 mm.	Calm	0	Fog -	+13° C.	Smooth.
Porer -	764·1 mm.	South	4	Overcast -	+16°C.	Moderate.
Fiume -	764·7 mm.	South	1	Overcast -	+14°C.	Moderate.
Lissa -	766·4 mm.	S.E.	3	¼ overcast	+17°C.	Slight to moderate.
Ostro point	766·3 mm.	North	1	½ overcast	+15°C.	Slight to moderate.
Venice -	765·6 mm.	North	1	Overcast -	+10°C.	Smooth.
Brindisi -	765·2 mm.	South	3	Overcast -	+13°C.	Slight to moderate.
Palermo -	—	S.W.	2	Fog -	+13°C.	Slight.
Corfu -	767·0 mm.	Calm	0	Clear -	+13°C.	Smooth.
Alexandria	766·8 mm.	N.W.	3	½ overcast	+19°C.	Slight.

Page 34.—VARIATION of the COMPASS.—*Cancel* section.

Page 35.—BUOYAGE and LIGHTS.—*Cancel* section, and *substitute*:—

BUOYS and BEACONS. — Uniform systems. — Coasts of Italy.—The Italian Government has directed that all buoys, beacons, and seamarks on the coasts of the kingdom shall be painted according to the rule adopted by the Congress of St. Petersburg; buoys to be left on the port hand entering a port or channel will therefore be painted red, and those to the left on the starboard hand, entering, will be painted black. The new colouring will be applied gradually, and notice will be given when the colours are changed.

Coasts of Austria.—A system of marking has been adopted, but has only been, as yet, partly carried out; it will probably be completed about August, 1915, and notice with regard to it will be given. The system is based on a combination of colour and shape; channels or fairways bounded by shallow water on both sides will be marked by red spar buoys on the starboard side, and black conical buoys on the port side, entering from seaward.

Beacons on the starboard side entering will also be painted red, and those on the port side black; where necessary, for the purpose of better distinction, beacons on the starboard side will be surmounted by a cone, and beacons on the port side by a cylinder.

Marks at seaward entrances to fairways will, if they are not already noticeable by conspicuous pile groups, light-buoys, &c., be surmounted by spherical cages.

Small shoals outside fairways will be marked by perches, some of which will be surmounted by spherical cages, or by spar buoys, surmounted by spherical cages.

Large shoals outside fairways will be marked by spar buoys or beacons surmounted thus:—In the middle of the shoal by a cylinder, placed vertically; on the north side of the shoal by two triangles, points upwards; on the south side of the shoal by two triangles, points downwards; on the east side of the shoal by two triangles, the upper one point upwards, and the lower one point downwards; and on the west side of the shoal by two triangles, the points of which are towards each other.

No rules have as yet been laid down for the marks surmounting buoys, beacons, &c., indicating shoals extending off-shore, or small banks close to the coast.

The coasts of Hungary, from Fiume to Maddelena cove, are steep, with deep water, and no system of indicating the few existing seamarks will be introduced.

Pilot vessels.—Lights.—The following regulations with regard to pilot vessels have been adopted by the Italian, Austrian, and Greek Governments:—

Page 35 continued.

Pilot vessels, when engaged on their station on pilotage duty, shall not show the lights required for other vessels, but shall carry a *white* light at the masthead, visible all round the horizon, and shall also exhibit a flare-up light or flare-up lights at short intervals, which shall never exceed 15 minutes.

On the near approach of or to other vessels they shall have their side lights lighted, ready for use, and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the *green* light should not be shown on the port side, nor the *red* light on the starboard side.

A pilot vessel, of such a class as to be obliged to go alongside a vessel to put a pilot on board, may show the *white* light instead of carrying it at the masthead, and may, instead of the coloured lights above mentioned, have at hand ready for use a lantern with a *green* glass on the one side and a *red* glass on the other, to be used as prescribed above.

A steam pilot vessel, exclusively employed for the service of pilots licensed or certified by any pilotage authority of the Committee of any pilotage district, when engaged on her station on pilotage duty and not at anchor shall, in addition to the lights required for all pilot boats, carry, at a distance of 8 feet below her *white* masthead light, a *red* light visible all round the horizon, and of such a character as to be visible on a dark night with a clear atmosphere at a distance of at least 2 miles, and also the coloured side lights required to be carried by vessels when under weigh.

When engaged on her station on pilotage duty and at anchor, she shall carry, in addition to the lights required for all pilot boats, the *red* light above mentioned, but not the coloured side light.

Pilot vessels, when not engaged on their station on pilotage duty, shall carry lights similar to other vessels of their tonnage.

Fishing vessels.—Lights.—Fishing vessels and fishing boats when under weigh, and not required by this article to carry or show the lights hereinafter specified, shall carry or show the lights prescribed for vessels of their tonnage under weigh.

(*a*) Open boats, by which is to be understood boats not protected from the entry of sea water by means of a continuous deck, when engaged in any fishing at night with outlying tackle extending not more than 150 feet horizontally from the boat into the seaway, shall carry one all-round *white* light.

Open boats, when fishing at night, with outlying tackle extending more than 150 feet horizontally from the boat into the seaway, shall carry one all-round *white* light, and, in addition, on approaching or being approached by other vessels, shall show a second *white* light at least 3 feet below the first light, and at a horizontal distance of at least 5 feet away from it in the direction in which the outlying tackle is attached.

Page 35 continued.

Vessels and boats, except open boats as defined in subdivision (*a*), when fishing with drift nets, shall, so long as the nets are wholly or partly in the water, carry two *white* lights where they can best be seen.

Such lights shall be placed so that the vertical distance between them shall be not less than 6 feet and not more than 15 feet, and so that the horizontal distance between them, measured in a line with the keel, shall be not less than 5 feet and not more than 10 feet. The lower of these two lights shall be in the direction of the nets, and both of them shall be of such a character as to show all round the horizon, and to be visible from a distance of not less than 3 miles.

Within the Mediterranean sea, sailing fishing vessels of less than 20 tons gross tonnage shall not be obliged to carry the lower of the two lights; should they, however, not carry it, they shall show in the same position (in the direction of the net or gear), a *white* light, visible from a distance of not less than one mile, on the approach of or to other vessels.

Vessels and boats, except open boats as defined in subdivision (*a*), when line fishing with their lines out, and attached to, or hauling their lines, and when not at anchor or stationary, shall carry the same lights as vessels fishing with drift nets. When shooting lines, or fishing with towing lines, they shall carry the lights prescribed for a steamer or sailing vessel under weigh, respectively.

Within the Mediterranean sea, sailing fishing vessels of less than 20 tons gross tonnage shall not be obliged to carry the lower of the two lights; should they, however, not carry it, they shall show in the same position (in the direction of the lines) a *white* light, visible from a distance of not less than one mile on the approach of or to other vessels.

In fog, mist, falling snow, or heavy rainstorms, drift-net vessels attached to their nets and vessels when trawling, dredging, or fishing with any kind of drag net, and vessels fishing with their lines out, shall, if of 20 tons gross tonnage or upwards, at intervals of not more than one minute, make a blast; if steam vessels with the whistle or siren, and if sailing vessels with the fog horn, each blast to be followed by ringing the bell. Fishing vessels and boats of less than 20 tons gross tonnage shall not be obliged to give the above-mentioned signals, but if they do not, they shall make some other efficient sound signal at intervals of not more than one minute.

Page 36.—Wireless telegraph stations.—*Cancel* section, and *substitute*:—

Wireless telegraph stations are established at Ancona,* Brindisi, Castelnuovo, Centopozzi, San Cataldo point, Bari,*, Sebenico, and Trieste.

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* Indicates service by day only.

Page 36 continued.

Communication to Italian stations for mercantile purposes should not be made from a greater distance than 45 miles, except in urgent cases; the limit under normal conditions is less than 70 miles. On establishing communication vessels should signal their distance from the station, and the longitude of all positions should be given from the meridian of Greenwich.

A vessel in distress should make the signal S.O.S., repeating it at intervals of a few seconds, and on receiving a reply, S.O.S. should be repeated; then the nature of the damage and the assistance required should be given.

Tunny fisheries.—Marking.—Tunny fisheries on the coasts of Italy are marked thus:—

1. *Tunny fisheries proper*:
   (*a*) The point at which the nets are attached to the shore is marked by a mast not less than 33 feet in height, surmounted by a disc 6 feet in diameter, painted in concentric white and black bands, and exhibiting at night two *white fixed* lights, 6 feet apart, and visible from a distance of 3 miles.
   (*b*) The outer left hand extremity of the nets as seen by an observer situated at the point at which the nets are attached to the shore, is marked by a buoy, boat, or floating mark, surmounted by a spar 16 feet in height, carrying by day two black balls placed vertically 6 feet apart, and by night two *fixed* lights, placed vertically, 6 feet apart, the upper *green*, the lower *white*, visible from a distance of 2 miles.
   (*c*) The outer right hand extremity of the nets, as seen by an observer situated as in (*b*), is marked by day as above (a mast and two balls), and at night by two *fixed* lights, placed vertically, 6 feet apart, the upper *red*, the lower *white*, and visible from a distance of 2 miles.

   The above-mentioned marks are on the outer limit of the Tunny nets, or placed outside it should the lights be a hindrance or obstacle to the fishing.
2. *Smaller tunny fisheries*:
   (*a*) The point where the nets are attached to the shore is marked as above.
   (*b*) The outer end of the nets is marked by day by a buoy, boat, or other floating mark surmounted by a mast 16 feet in height, with two balls, placed vertically, 6 feet apart, and at night by two *fixed* lights, placed vertically, 6 feet apart, the upper *red*, the lower *white*, visible from a distance of 2 miles.

Page 36 continued.

3. *Tunny fishery nets laid out in an anchorage*:

In addition to the foregoing, every anchor for nets is marked by a buoy, or otherwise.

CHAPTER II.

Chart 2701, Gulf of Cattaro to Corfu.

Page 37.—CAPE STA. MARIA di LEUCA.—Wireless telegraph.—The wireless telegraph station at Cape Sta. Maria di Leuca has been closed.

Page 38.—Port Tricase was entered and cleared by 61 vessels, of 21,358 tons, in 1912.

Page 39.—LIGHT.—The lighthouse at Cape Otranto is 105 feet in height.

Storm signals are exhibited from the semaphore near Palascia tower. *See* page 10.

Plan, Port Otranto, on 2701.

PORT OTRANTO.—In the passage between Le Secche and the rocks off S. Nicola point is a shoal with 3 feet water.

Shipping.—In 1912, 42 vessels, of 11,764 tons, entered and cleared the port.

Chart 2701, Gulf of Cattaro to Corfu.

Page 40.—Buoy.—*Cancel* section, and *substitute*:—

Light-buoy.—A red conical light-buoy, exhibiting a *white flashing* light *every three seconds* (flash, *three-tenths of a second*), is moored nearly a cable eastward of the Missipezza.

Page 41.—San Cataldo point.—A rocky ledge, with from 3 feet to 2 fathoms water, extends about a quarter of a mile eastward from the point.

Light.—San Cataldo point light has been altered to a *white flashing* light *every ten seconds.*

Shoals.—A shoal, with $4\frac{3}{4}$ fathoms water, is situated $1\frac{3}{4}$ miles north-north-eastward of San Gennaro tower, and there is a similar shoal three-quarters of a mile further north-westward.

Plan 1492, Brindisi harbour.

Cape Cavallo.—Light-buoy.—A light-buoy, exhibiting a *white flashing* light *every three seconds* (flash, *three-tenths of a second*), is moored about $1\frac{3}{10}$ miles north-eastward of Cape Cavallo.

Page 42.—HARBOURS.—Outer harbour.—A channel, about 400 feet wide, has been dredged to the depth of $4\frac{1}{2}$ fathoms into the outer harbour, between Castello island and the main. It is marked

Page 42 continued. Plan 1492.

by four beacons, surmounted by squares on the east side, and by three beacons, surmounted by triangles, on the west side.

Inner harbour.—There is a depth of 4¾ fathoms shown on plan 1492 in the channel leading to the inner harbour, and its approach from seaward. Dredging is in progress.

The northern and eastern sides of the town are faced by quays. Between the Port office and the Romana column is the slightly projecting town quay, used by the P. & O. Company's vessels. On the north-western side of Pigonati channel is the P. & O. Company's coaling quay.

A masonry sea-wall, about 5 feet high, has been built around the western arm of the harbour, where deep quays do not exist, and on it is a broad road. At frequent intervals on the wall are large bollards for securing vessels' stern hawsers, and the whole length is lit by electric arc lights. Vessels lie about 30 feet off the wall, and goods are loaded or discharged by the use of stages.

From about a cable eastward to 3 cables westward of the castle a line of wooden pontoons stands out on large concrete piles. This line is broken at intervals to give room for a pier with two small cranes, a 4-ton revolving crane, a camber for submarines, a floating dock, and another revolving crane. A large part of the inner harbour has been reserved for men-of-war exclusively, and on the north shore of the western arm are extensive Government coal depôts; there are other depôts on the eastern side of the entrance to the inner harbour. At the head of the southern arm is an oil depôt, with two jetties, where six destroyers can take in oil at the same time.

Page 43.—Buoys.—The outer mooring buoy for the use of the vessels of the Peninsular and Oriental Steam Navigation Company lies about 4½ cables, W. by S., from the lighthouse on Fort Mare mole, and the inner buoy is about three-quarters of a cable further south-westward.

Three mooring buoys lie on the eastern side of the southern arm of the inner harbour, and one mooring buoy eastward of Arena point, in the western arm.

Deposit.—A buoy is moored about 5 cables east-north-eastward from Licola point to mark a place for depositing material arising from dredging in Brindisi harbour.

Secca del Fico.—*Cancel* section, and *substitute*:—

Secca del Fico extends about a quarter of a mile north-eastward from Secca del Fico point, which is situated about half a mile eastward of the entrance to the inner harbour; it has less than 3 fathoms water, but Fontanella rock, half a cable off the beach, has 4 feet water. Light-beacon, page 44.

Secca dell' Arco has 3 fathoms water.

Page 43 continued. Plan 1492.

A rock.—*Cancel* section, and *substitute*:—

Rock.—A rock, situated about 3 cables south-eastward of Riso point lighthouse, has been removed to a depth of $5\frac{1}{4}$ fathoms.

Pedagne rocks.—A breakwater extends from Cape Bianco north-eastward to the southern point of Pedagna grande, and closes Trapanelli passage, but there are two small passages for boats, 100 yards and 400 yards from Cape Bianco.

Cancel paragraph after **Clearing marks,** commencing "Small craft."

Conspicuous chimney.—There is a conspicuous chimney on the shore about three-quarters of a mile west-south-westward of Cape Bianco, and near the mouth of the Fiume grande.

Page 44.—LIGHTS.—Fort Mare mole.—*Cancel* paragraph, and *substitute*:—

Fort Mare breakwater.—A *green occulting* light *every five seconds* (eclipse, *one and a half seconds*) is exhibited, at 39 feet above high water, from a circular masonry tower, 30 feet high, on the end of Fort Mare breakwater, and should be seen from a distance of 7 miles.

Secca del Fico.—*Cancel* paragraph, and *substitute*:—

Secca del Fico.—A *red fixed* light is exhibited from a beacon situated in about $3\frac{1}{2}$ fathoms water, $2\frac{2}{10}$ cables, S. 52° W., from the lighthouse on Fort Mare breakwater. The light is unwatched.

Inner harbour entrance.—*Cancel* section, and *substitute*:—

Inner harbour entrance.—Two *red fixed* electric lights, placed vertically 29 and 36 feet above high water, are exhibited from a red hut, 24 feet high, near the head of Pigonati mole, on the south-eastern side of the entrance to the inner harbour, and should be seen from a distance of 5 miles. The lights are unwatched.

Two *green fixed* electric lights, placed vertically 29 and 36 feet above high water, are exhibited from a red hut, 24 feet high, on the north-western side of the entrance, and should be seen from a distance of 5 miles. The lights are unwatched.

A *red fixed* electric light is exhibited, at 29 feet above high water, from an iron standard, 22 feet high, on Pigonati quay, about a cable south-westward of Pigonati mole, and should be seen from a distance of 5 miles. The light is unwatched.

A *green fixed* electric light is exhibited, at 29 feet above high water, from an iron standard, 22 feet high, on the inner end of the north-west quay, opposite the light on Pigonati quay, and should be seen from a distance of 5 miles. The light is unwatched.

Inner harbour.—The light exhibited from an iron shed on the North quay has been discontinued. *Cancel* paragraph.

Page 44 continued. Plan 1492.

Entry signals.—The following signals are made from an iron trellis mast situated near the Romana column, and on the prolongation of the axis of the Pigonati (entrance) channel, to indicate to in-going vessels that the entrance is clear, or that the channel is obstructed by an out-going vessel:—

Signal.	Signification.
By day—Two discs horizontal - - - -	Entrance clear.
Two discs vertical - - - - -	Entrance closed.
At night—Three *red fixed* lights in a triangle -	Entrance clear.
Three *red occulting* lights in a triangle -	Entrance closed.

The discs are 13 feet apart. The lights, which are unwatched, are placed at the points of an equilateral triangle, apex upwards, the upper light being 59 feet above high water, and the lights about 11 feet apart.

The lights appear as one light at the distance of about 5 miles, and are separately distinguishable at the distance of about a mile.

In order to avoid accidents in Pigonati channel it is directed that an out-going vessel must wait, and leave the channel clear for an in-going vessel, when both vessels would otherwise be in the channel at the same time.

Dredging.—Signals.—Dredging works are in progress in the vicinity of Pigonati channel, between the inner road and the inner harbour, and during their continuance the following signals are to be made, and their signification must be strictly complied with.

Before entering or leaving the inner harbour, a steam vessel is to give four short blasts by the siren, and a sailing vessel four blasts by a horn. These signals will be replied to thus:—

A black ball hoisted on the operating dredger, or other craft, signifies passage closed.

A red flag signifies passage clear.

The flag will be hoisted on that side of the dredger on which the vessel can pass.

Dredging work is carried on between daylight and sunset.

Prohibited anchorages.—Merchant vessels are prohibited from anchoring in the outer harbour, northward of a line drawn from Fort Mare semaphore, N. 86° W., to the west shore; in the inner harbour, westward of a line drawn N. 21° W. across the western arm, about three-quarters of a cable westward of Arena point, and south-

Page 44 continued. Plan 1492.

ward of a line drawn S. 77° W. across the southern arm, about a cable from the head.

The limits of the prohibited areas are marked by posts surmounted by balls.

Page 45.—DIRECTIONS.—From the north-westward.—*Cancel* the second paragraph, and *substitute*:—

When Pedagne rocks lighthouse bears S.E., and Fort Mare breakwater lighthouse S.W., steer South until the latter lighthouse bears W.S.W., to avoid the 5¼-fathom rock situated about 3 cables south-eastward of Riso point lighthouse. Then steer to pass about half a cable southward of Fort Mare breakwater lighthouse and Bardet shoal bell buoy, and northward of the Secca del Fico light-beacon.

Continue westward until the trellis mast from which the entry signals are exhibited is open north-westward of the south-eastern shore of Pigonati channel, then steer for the trellis mast, keeping it in mid-channel.

Vessels are required to go as slow as possible through the Pigonati channel.

By night.—*Cancel* section, and *substitute*:—

At night.—Approach with Fort Mare breakwater light bearing W.S.W., and when Pedagne rocks light bears S.E. steer to pass southward of the breakwater light, and northward of Secca del Fico light. Then steer W. ½ N. until the three *red* lights, exhibited from an iron trellis mast near the Romana column, are open north-westward of the two vertical *red* lights on Pigonati mole, if the channel is clear, when, avoid the two mooring buoys in the inner road and steer for the three *red* lights near the Romana column, and through Pigonati channel, in which the *green* lights are left on the starboard, and the *red* lights on the port hand.

In leaving the harbour, keep the three *red* lights near Romana column open of the south-eastern side of Pigonati channel until Secca del Fico light bears East, to avoid the shoal ground extending from the southern shore of the inner road.

The town of Brindisi had 28,438 inhabitants by the census of 1911.

Page 46.—Third paragraph, *cancel*, and *substitute*:—

The railway station is on the western side of the town, but a branch runs from it, round the southern side of the town, to near the Port office.

Time signal.—A ball is hoisted close up to the top of the eastern mast of the wireless telegraph station, situated about 1¾ cables north-eastward from Arena point, at five minutes before the signal, and

Page 46 continued. Plan 1492.

dropped at noon Standard mean time, or 23h. 0m. 0s. Greenwich mean time.

A gun is fired from Vittoria castle at noon, but must not be used for determining the errors of chronometers.

Pratique.—Regulations.—Vessels entering the port from abroad after sunset, and not desiring to obtain pratique immediately, should anchor in the outer or inner road and hoist a *red* light.

Vessels entering the port from abroad after sunset, and desiring to obtain pratique immediately, are to hoist a *red* light, and may enter the inner harbour.

The *red* light is always to be kept hoisted until pratique has been granted by the proper officer.

These regulations must be strictly complied with.

Trade.—In 1912 the value of the imports was £391,922, and that of the exports £217,985. In the same year 1,339 steam vessels, of 1,734,869 tons, and 201 sailing vessels, of 25,822 tons, entered the port.

Coal.—Owing to the formation of labour leagues and trade unions with a limited number of members, the discharge of steam colliers is limited (1913) to 500 tons a day.

Water.—At the back of the castle are tanks containing 5,000 tons of distilled water, which is laid on to each destroyer's berth.

Page 47.—Dock.—*See* Appendix.

Patent slips; *cancel* paragraph.

Hospital.—The naval hospital can take from 100 to 150 patients, and an additional 30 to 40 patients in the isolation wing.

Repairs.—The engineering works of the Cantiere Meccanico Brindisino are reported to be capable of executing ordinary repairs to hull, machinery, and boilers. The foundry can undertake castings in brass up to 15 cwt., and in cast iron up to 30 tons.

Wireless telegraph.—A wireless telegraph station has been established at Brindisi, and is open to the public at all times. The call letters are I.C.E.

Telegraph cable.—A telegraph cable is laid between Brindisi and San Giovanni di Medua.

Page 48.—First marginal reference: *For* "Chart 190 [799]" *read* "Chart 199."

Plan, Monopoli, on chart 199.

PORT MONOPOLI.—The mole on the northern side of the port is nearly completed; it extends east-north-eastward about 250 yards from the shore, and then turns east-south-eastward 250 yards; its outer end is about 250 yards north-north-eastward of the northern end of the southern mole.

Page 48 continued. Plan on chart 199.

LIGHT.—*Cancel* section, and *substitute*:—

LIGHTS.—A *red fixed* electric light is exhibited, at 50 feet above high water, from a red hexagonal tower, 45 feet high, on the southern molehead at Port Monopoli, and should be seen from a distance of 9 miles.

A *green fixed* electric light is exhibited, at 34 feet above high water, from a post about 70 yards within the outer end of the northern mole at Port Monopoli, and should be seen from a distance of 6 miles. The light is unwatched. This light should not be closed to less than 100 yards.

Plan, Bari, on chart 199.

Page 49.—BARI.—The population of the town was 102,844 by the census of 1911.

Wireless telegraph station.—The wireless telegraph station is at San Cataldo point; it is open from 8 a.m. to midnight. The call letters are I.C.Q.

Page 50.—Port Bari.—A quay is being constructed along the Pizzoli groin. Three mooring buoys are charted in the new port.

Dredging.—When the dredger is away from the dredging ground each of her mooring buoys is marked by a *red fixed* light.

Trade.—In 1912 the value of the imports at Bari was £3,044,271, and that of the exports £2,179,696. In the same year, 706 steam vessels, of 545,866 tons, and 102 sailing vessels, of 8,088 tons, entered the port.

LIGHTS.—San Cataldo point.—The *fixed* light should be seen from a distance of 16 miles.

Breakwater.—*Cancel* section, and *substitute*:—

Foraneo mole.—A *white flashing* light, showing a flash of *eight seconds* duration *every twenty seconds*, is exhibited, at 49 feet above high water, from a masonry tower, with dwelling, 41 feet high, 54 yards within the extreme of Foraneo mole, and should be seen from a distance of 12 miles.

South jetty.—*Cancel* section, and *substitute*:—

Pizzoli groin.—A *green fixed* light is exhibited, at 30 feet above high water, from a small tower on the northern extreme of Pizzoli groin, and should be seen from a distance of 5 miles. For the arc of visibility, *see* Light list.

Page 51.—Old port.—The north mole, from the head of which the light is exhibited, is named S. Antonio mole.

Page 51 continued. Plan, Molfetta, on chart 199.

MOLFETTA.—A mole extends north-north-eastward about a cable from the southern shore of the port, and is (1914) being continued about half a cable further.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *white flashing* electric light, showing a flash of *eight seconds* duration *every thirty seconds*, is exhibited, at 66 feet above high water, from a white octagonal tower on a circular base, 60 feet high, on the angle of the mole about 3 cables from the outer end, and should be seen from a distance of 14 miles. For the arc of visibility, *see* Light list.

A *red fixed* light is exhibited, at 27 feet above high water, from a lamp-post, 15 feet high, on the outer end of the mole, and should be seen from a distance of 4 miles, but it cannot be lighted in bad weather. It is unwatched.

Page 52.—*Cancel* first paragraph, and *substitute*:—

A *red fixed* light is exhibited, at 58 feet above high water, from a masonry column, 49 feet high, situated near the Harbour master's office, at the head of the port, and should be seen from a distance of 5 miles; it is obscured when bearing southward of S. 27° E. It is unwatched.

A *green fixed* unwatched electric light marks the extreme of the works in progress for the extension of a mole on the southern side of the port.

Beacon.—A white truncated pyramidal stone beacon, with square base, 11 feet high, stands on the extreme western rock of the Secca di S. Domenico.

Plan, Barletta, on chart 199.

BARLETTA.—The population of Barletta was 44,422 by the census of 1911.

Page 53.—Depths.—The depths in the harbour were reported in 1912 to have decreased about 3 feet owing to silting.

A shoal with 2½ fathoms water extends three-quarters of a cable eastward from the end of the west mole.

A light-buoy.—*Cancel* paragraph, and *substitute*:—

The area being dredged is marked by a white buoy showing a *red* lantern light.

The dredger does not obstruct the entrance to the port.

Trade.—In 1912 the value of the imports at the port of Barletta was £615,520, and that of the exports £271,120. In the same year 707 steam vessels, of 403,749 tons, and 430 sailing vessels, of 22,829 tons, entered the port.

Coal.—About 50,000 tons of coal were imported in 1912; there are

Page 53 continued. Plan on chart 199.
usually about 1,800 tons of coal or patent fuel kept in stock by private firms.

LIGHTS.—West mole.—The light exhibited from the lighthouse on the middle inner angle of the West mole is a *white group occulting* light, showing groups of *two* eclipses *every twenty seconds*, thus:—light, *five seconds;* eclipse, *two seconds;* light, *five seconds;* eclipse, *eight seconds;* and which should be seen from a distance of 14 miles; it is unwatched.

The light exhibited from the West molehead is unwatched.

A *green fixed* unwatched light is exhibited from the south-eastern corner of the inner angle of the West mole. For the arc of visibility, *see* Light list.

A *red fixed* light is exhibited from the north-eastern extreme of the quay, near the Harbour master's office. For the arc of visibility, *see* Light list.

At night.—*Cancel* paragraph.

Buoy.—*Cancel* paragraph.

Chart 199, Brindisi to Ortona.

Page 54.—Barletta road.—*Cancel* second paragraph, and *substitute*:—

At night, anchor in from 7 to 9 fathoms water, with the *white occulting* light bearing about S.W., distant from 2 to 3 miles.

Shoal.—*Cancel* paragraph, and *substitute*:—

Margherita di Savoia, a small port, is situated about 3½ miles west-north-westward of the mouth of Ofanto river.

LIGHT.—Two *white fixed* electric lights, placed vertically a short distance apart, are exhibited, at 26 feet above high water, from a post, 20 feet high, at the end of the mole of Margherita di Savoia, and it is said should be seen from a distance of 10 miles.

Plan, Manfredonia, on chart 199.

MANFREDONIA.—The population of the town of Manfredonia was 13,355 by the census of 1911.

Page 55.—Harbour.—The extension of the mole has been completed to a length of 620 yards from the shore. The mole must be approached with caution, as there are depths of about 1¼ fathoms for 90 feet off it.

Dredging is in progress in the inner part of the harbour. There are two mooring buoys in the harbour.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *white occulting electric* light *every ten seconds* (eclipse, *five seconds*), is exhibited, at 67 feet above high water, from a

Page 55 continued. Plan on chart 199.

white octagonal tower over a two-storied dwelling, 60 feet high, situated at the inner end of the mole, and should be seen from a distance of 14 miles.

A *green fixed* electric light is exhibited from a post on the outer extreme of the mole, and should be seen from a distance of 2 miles.

Centopozzi.—Wireless telegraph.—There is a wireless telegraph station at Centopozzi (*Lat. 41° 42′ N., Long. 15° 37′ E.*), about 15 miles west-north-westward of Manfredonia. It is open to the public from sunrise to sunset. The call letters are I.C.M.

Plan, Vieste, on chart 199.

Page 57.—Port Vieste.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white flashing* light *every six seconds* (flash, *two seconds*) is exhibited, at 132 feet above high water, from a white octagonal tower over a two-storied dwelling, 90 feet high, on Sta. Croce islet, and should be seen from a distance of 17 miles. For the arc of visibility, *see* Light list and plan.

Wireless telegraph.—*Cancel* paragraph; the station has been closed.

Chart 199, Brindisi to Ortona.

Rodi.—A mole is being constructed at Rodi.

Lights.—A *red fixed* light is exhibited, at 39 feet above high water, from a masonry hut on the point north-eastward of the town, and should be seen from a distance of 6 miles; it is unwatched.

The extreme of the mole in progress is marked by a *white fixed* light.

Anchorage.—There is a heavy breaking sea during sirocco winds, which makes the anchorage unsafe, and exit from the port dangerous; it is therefore advisable to quit the anchorage as soon as a sirocco sets in.

Plan, Tremiti islands anchorage, on chart 199.

Page 58.—TREMITI ISLANDS.—There is a passage between San Domino and Cretaccio islands about half a cable wide, with $1\frac{3}{4}$ fathoms water.

Mooring buoys.—A mooring buoy is placed about a cable westward of the south-western point of San Nicola island, and another about $1\frac{1}{4}$ cables northward of the same point.

Plan, Tremiti islands, on chart 199.

Page 59.—PIANOSA ISLE.—LIGHT.—A *white flashing* light *every five seconds* (flash, *half a second*) is exhibited, at 67 feet above high water, from a metal trellis tower on the south summit of

Page 59 continued. Plan on chart 199.

Pianosa isle, and should be seen from a distance of 13 miles. It is unwatched.

Chart 199, Brindisi to Ortona.

Page 62.—Penna point.—LIGHT.—A *white fixed* and *flashing* light, showing *one* flash *every thirty seconds* (flash, *one and two-tenths seconds*) is exhibited, at 279 feet above high water, from an octagonal tower, 199 feet high, on Penna point; the *fixed* light should be seen from a distance of 13 miles, and the *flash* of 23 miles.

Plan, Ortona, on chart 200.

Page 63.—ORTONA.—Harbour.—The mole is being extended (1914).

LIGHTS and **Caution.**—*Cancel* sections, and *substitute*:—

LIGHT.—A *green occulting* light *every ten seconds* (eclipse, *three seconds*) is exhibited, at 36 feet above high water, from the molehead, and should be seen from a distance of 5 miles.

Caution.—Vessels must give a proper berth to this light to avoid the extension works.

Chart 200, Ortona to the River Po.

PESCARA RIVER.—Moles.—A mole extends from the northern side of the entrance to Pescara river, and a mole is in course of construction from the southern side.

Lights.—A *red fixed* light is exhibited, at 16 feet above high water, from an iron mounting, 21 feet high, on the outer extreme of the southern mole, and a *green fixed* light is exhibited, at 16 feet above high water, from an iron mounting, 21 feet high, on the outer extreme of the northern mole.

Page 64.—Colonella.—Semaphore.—A semaphore, surmounting a large tower, painted black and white in squares, is situated about 1½ miles southward of Tronto river entrance.

CHAPTER III.

Chart 200, Ortona to River Po.

Page 66.—S. Benedetto.—There is a mole here, 200 yards long.

Light.—A *red fixed* light is exhibited, at 18 feet above high water, from a mast on the mole. It is unwatched.

Pedaso.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white flashing* light *every twenty seconds* (flash, *one and six-tenths seconds*) is exhibited, at 164 feet above high water, from an octagonal tower and dwelling, 60 feet high, on the coast half a mile southward of Pedaso, and should be seen from a distance of 19 miles.

Plan 3212, Port of Ancona.

Page 69.—ANCONA.—Trade.—In 1910, the port was entered by 1,119 steam vessels and 2,001 sailing vessels, of 1,103,584 total tons.

Coal.—About 9 days' notice should be given if several thousand tons are required.

Harbour.—A mole, which is known as the Health mole, projects about a cable south-westward from the North mole, about a cable from its inner end; on its north-eastern part, is the Port and Health office.

A mole is in course of construction southward from the battery on the North mole; its present length (1912) is about 100 yards.

Pages 69, 70.—Depths.—*Cancel* first paragraph of section, and *substitute*:—

The depth of water between the moleheads is from $3\frac{3}{4}$ to $4\frac{1}{2}$ fathoms, and in the northern part of the harbour from $4\frac{1}{2}$ to 4 fathoms. In the southern part of the harbour the depth is less than 3 fathoms. The bottom is dark soft mud, except in the southern part of the harbour where it is rock. There are bollards on the moles for vessels at anchor to haul their sterns in. Dredging is in progress.

Page 70.—Beacon.—*Cancel* section.

LIGHTS.—Mount Cappuccini.—*Cancel* arc of visibility.

North molehead.—*Cancel* paragraph, and *substitute*:—

A *red flashing* light *every five seconds* (flash, *half a second*) is exhibited, at 34 feet above high water, from a white tower, 28 feet high, on the North mole head, and should be seen from a distance of 11 miles.

North mole.—A *red fixed* light is exhibited, at 13 feet above high water, from the outer end of the mole in progress from the battery on the North mole.

A *red fixed* light is exhibited, at 15 feet above high water, from a mast at each of the two outer corners of the Health mole.

Storm signals are exhibited from Mount Cappuccini semaphore station. *See* page 10.

Time signal.—A ball is hoisted half-way up 5 minutes, and close up 3 minutes, before the signal, at a mast at Mount Cappuccini semaphore. It is dropped at noon standard mean time, or 23h. 0m. 0s. Greenwich mean time. Should the signal be inaccurate the ball will be hoisted half-way up as soon as possible after the signal, and kept in that position for 5 minutes.

A gun is fired at noon standard mean time, simultaneously with the drop of the ball.

Page 70 continued. Plan 3212.

Should either of the signals fail, or be inaccurate, they will both be repeated at 1h. 0m. 0s. standard mean time.

Wireless telegraph.—The call letters are I.C.A.

Plan, Senigallia, on chart 200.

Page 71.—SENIGALLIA.—Works for extending the East mole of the harbour about 150 feet are in progress.

Page 72.—Light.—A *red fixed* electric light is exhibited from posts on the outer extreme of the East mole to mark the works in progress.

Plan, Fano, on chart 200.

Fano port.—Works for extending the mole eastward of the eastern mole of the harbour and the western mole are in progress.

Page 73.—LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *white fixed* light is exhibited, at 58 feet above high water, from a red circular tower and dwelling, 51 feet high, situated on the eastern side of Fano port just within the entrance moles, and should be seen from a distance of 10 miles.

A *red fixed* light is exhibited, at 27 feet above high water, from a masonry turret, 19 feet high, on the mole eastward of the eastern mole of the harbour, and should be seen from a distance of 4 miles. The works in progress for extending this mole are marked by a *red* light.

A *red fixed* lantern light is exhibited from a pole on the outer end of the mole on the eastern side of the entrance, in fine weather.

A *green fixed* light is exhibited from the western molehead. The works in progress for extending this mole are marked by a *green* light.

Plan, Pesaro, on chart 200.

Pesaro.—Shoals.—Foul ground, terminating in a rock with less than 6 feet water, extends nearly three-quarters of a cable northward from the outer end of the eastern pier, and a rock, with one fathom water, lies 1½ cables north-westward from the same place.

Plan, Rimini entrance, on chart 200.

Page 75.—LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *white occulting* light *every fifteen seconds* (eclipse, *five seconds*) is exhibited, at 67 feet above high water, from a yellow square brick tower and dwelling, 59 feet high, near the inner end of the East mole, and should be seen from a distance of 14 miles.

A *red fixed* light is exhibited, at 25 feet above high water, from a white turret with a copper cupola, 17 feet high, situated on and near the outer end of the East mole, and should be seen from a distance of 5 miles. When freshets occur in Marecchia river this light is extinguished, it being then dangerous to enter. The *red fixed* light bears N. by E. ½ E. from the *white occulting* light.

[illegible]

Should either of the signals fail, or be in error, they will soon be [illegible] or [illegible] stations.

Wireless telegraph.—[illegible] Indian [illegible]

[illegible]

Page 71.—SERVICE.—[illegible] extending the East [illegible] of the Indian [illegible] [illegible]

Page 72.—Light.—A red [illegible] light is exhibited from [illegible] the outer entrance of the [illegible] the [illegible] [illegible]

[illegible]

Page [illegible].—Where [illegible] extending the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Page 73.—LIGHTS.—[illegible]

LIGHTS.—A white [illegible] light is exhibited at the [illegible] [illegible] [illegible] [illegible] [illegible]

Page 75 continued. Plan on chart 200.

Light (intended).—A *green occulting* light *every two seconds* (eclipse, *one second*) is to be exhibited, at 25 feet above high water, from a black iron mast over a hut on the outer end of the West mole, and will be seen from a distance of 4 miles.

Fog signal.—*Cancel* paragraph, and *substitute*:—

Fog signal.—A bell, placed 24 feet above high water, in a grey metal cylindrical turret, with a masonry base, 17 feet high, 40 yards from the outer end of the East mole, is struck *once every fifteen seconds*; the signal is also given in freshets.

Chart 200, Ortona to the River Po.

Cesenatico.—The north-west pier is completed.

Page 76.—LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *red fixed* light is exhibited at 27 feet above high water from the south-east pierhead.

A *white fixed* light is exhibited, at 61 feet above high water, from a square tower, 58 feet high, situated about 1½ cables within the outer end of the south-east pier, and should be seen from a distance of 8 miles.

A *green fixed* light is exhibited from a square grey house on the north-west pierhead.

Fog signal.—*For* "outer light-turret" *read* "south-east pierhead."

Cervia.—The entrance to the port of Cervia is between two moles.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *white fixed* light is exhibited, at 53 feet above high water from a red octagonal tower, 41 feet high, situated near the inner end of the South mole, and should be seen from a distance of 8 miles.

A *red fixed* light is exhibited, at 14 feet above high water, from an iron lamp-post, 7 feet high, on the South molehead, and should be seen from a distance of 2 miles; it is unwatched.

Ronco river.—Semaphore.—There is a semaphore station about 1½ miles southward of the entrance to Ronco river.

Page 77.—RAVENNA.—The population of Ravenna was 70,665 in 1913.

Plan, Corsini entrance, on chart 200.

PORT CORSINI.—*Cancel* paragraph, and *substitute*:—

PORT CORSINI is the mouth of the canal which commences at Ravenna, and during its course of 6 miles is fed by the water from the neighbouring marshes. Vessels of some 80 tons ascend it, with the flood, to the town. The depth of water at the entrance is maintained by two moles, 120 feet apart, which project eastward

Page 77 continued. Plan on chart 200.

about 870 yards, the southern mole extending rather beyond the other; both moles are being extended eastward. The depth in the channel to Corsini is 13 feet, and 9 feet can be carried to Ravenna. The entrance is liable to obstruction during extension of moles. The pilot station is at the lighthouse on the southern side of the canal, 2 cables inland.

LIGHTS.—*Cancel* first three paragraphs of section, and *substitute*:—

LIGHTS.—A *white fixed* and *flashing* light *every thirty seconds* (flash, *six seconds*) is exhibited, at 87 feet above high water, from a white octagonal tower over a three-storied dwelling, 80 feet high, situated about 2 cables inland on the southern side of the canal; the *flash* should be seen from a distance of 15 miles, and the *fixed* light of 7 miles.

South mole.—A *red fixed* light is exhibited, at 23 feet above high water, from a grey iron house on and near the end of the southern mole, and should be seen from a distance of 6 miles. Extension works in progress are marked by a provisional *red* light.

North mole.—A *green fixed* light is exhibited, at 23 feet above high water, from a grey iron house on and near the end of the northern mole, and should be seen from a distance of 5 miles; it is unwatched. For the arc of visibility, *see* Light list. Extension works in progress are marked by a provisional *green fixed* light.

Buoys.—A red conical buoy is moored about a cable eastward of the southern mole extension works, and a similar buoy close south-eastward of the same mole end.

Mark.—From the middle of the head of the North mole a mast projects horizontally 13 feet, and at its end is a red cone.

Page 78.—Semaphore.—*Cancel* section; the semaphore is closed.

Chart 200, Ortona to the River Po.

Magnavacca.—A bar has formed at the entrance to Port Magnavacca, rendering access difficult.

Page 79.—LIGHTS.—*Cancel* second paragraph of section, and *substitute*:—

A *red fixed* light is exhibited, at 32 feet above high water, from a mast surmounting a grey hut, situated 27 yards from the southern extreme of the piles, and should be seen from a distance of 6 miles. The lights are unwatched.

Chart 201, River Po to Cape Promontore.

Page 81.—Light.—*Cancel* paragraph, and *substitute*:—

Goro point.—LIGHT.—An *alternating fixed* and *flashing* light *every fifteen* seconds, showing *white fixed twelve seconds, red* flash *three seconds*, is exhibited, at 66 feet above high water, from a

[illegible] southward. [illegible]

about 810 yards, the southern mole extending rather beyond the other; both moles are being extended eastward. The depth in the channel to Corsini is 15 feet, and 9 feet can be carried to Bazemo. The entrance is liable to obstruction during extension of moles. The pilot station is at the lighthouse on the southern side of the canal, 2 cables inland.

LIGHTS.—(Insert first three paragraphs of section, and substitute:—

LIGHTS.—A white [illegible] flashing light every thirty seconds, flash, [illegible], is established, at 87 feet above high water, upon a white octagonal tower over a three-storied dwelling, 80 feet high, situated about 2 cables inland on the southern side of the canal; the light should be seen from a distance of 17 miles, and the [illegible] light of 7 miles.

South mole.—A red fixed light is established, at 25 feet above high water, upon a grey iron tower on and near the end of the southern mole, and should be seen from a distance of 4 miles. Buoys with [illegible] are moored by a pivot [illegible] light.

North mole.—A [illegible] light is established, at 23 feet above high water, upon a grey iron tower on and near the end of the [illegible] mole, and should be seen from a distance of 5 miles; it is [illegible] for the sake of visibility, see Light list. Extension moles [illegible] are marked by a provisional green fixed light.

Buoys.—A red conical buoy is moored about a cable eastward of the southern mole extension works, and a similar buoy [illegible] moored off the same mole end.

Mark.—[illegible] on the middle of the head of the North mole [illegible] projects [illegible] 13 feet, and is painted a red cone.

Page 78.—Semaphore.—(Insert section: the semaphore [illegible]

[illegible] Corsini.

Marnavecce.—A [illegible] is moored at the entrance to [illegible] canal, rendering access difficult.

Page 79.—LIGHTS.—(Insert second paragraph of section [illegible]

[illegible]

[illegible] at 32 feet above high water, [illegible] a grey post, situated 37 yards from the [illegible] of the pier, and should be seen from a distance of [illegible] The light is extinguished.

[illegible]

Page 81.—Light.—(Insert paragraph and [illegible]

Cape point.—LIGHT.—An [illegible] [illegible] established, at 27 feet above high water, [illegible]

Page 81 continued. Chart 201.

white conical tower rising from a two-storied house, 59 feet high, situated on Goro point, which is on the south-western side of the Po di Goro; the light should be seen from a distance of 14 miles. For the arc of visibility, *see* Light list and chart. View on charts 200 and 201.

Po della Pila.—The shoal on the southern side of the Po della Pila has extended, and there are (1913) depths of less than 3 fathoms to about 4½ miles east-south-eastward of Maestra point lighthouse. The light-and-whistle-buoy should be given a good berth, as there are depths of less than 3 fathoms southward and south-eastward of its position.

LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—Maestra point.—A *white flashing* light *every minute* (flash, *thirteen seconds*) is exhibited, at 148 feet above high water, from a white cylindrical tower over a white two-storied dwelling, 139 feet high, on Maestra point, northern side of Po della Pila entrance, and should be seen from a distance of 18 miles. The eclipses are not total within 10 miles.

A ray of light is thrown vertically from the lantern.

Page 82. — Light-buoy. — A conical light-and-whistle-buoy, painted black and white in horizontal stripes, and exhibiting a *white occulting* light *every two seconds* (eclipse, *one second*) is moored about 4 miles east-south-eastward of Maestra point lighthouse.

Port Levante.—Leading lights.—Rear.—A *white occulting* light *every six seconds* (eclipse, *one second*) is exhibited, at 26 feet above high water, from a white metal trellis tower near the coast about a mile northward of the Po di Levante, and should be seen from a distance of 9 miles.

Front.—A *white occulting* light *every second* (eclipse, *half a second*) is exhibited from a movable metal mounting situated 220 to 330 yards from the rear light, and should be seen from a distance of 7 miles. This light is moved as changes in the channel require.

Small vessels approach the entrance to the channel leading to Port Levante with the lights in line, which leads clear of the shifting bank to the eastward of the entrance.

Page 83.—APPROACHES TO VENICE.—Submarine vessels.—*See* page 9.

Plan 1483, Ports Chioggia, Malamocco, and Lido.

Navigation in the channels.—Regulations.—Sea-going steam vessels are to proceed at a moderate speed, not at any time exceeding 6 knots, and when near other vessels moored in the channel the speed is to be reduced to the slowest possible to keep the vessel under control.

[illegible]

[illegible]

Fort Levanto.—Leading lights.—[illegible]

[illegible]

Fuse.—[illegible]

[illegible]

Navigation in the channels.—[illegible]

[illegible]

Page 83 continued. Plan 1483.

Steam vessels entering or leaving should proceed at intervals of not less than 10 minutes from one another.

Steam vessels of more than 1,500 tons net, when leaving Marittima in ballast, with a favourable stream or strong wind, should have a tug ahead to assist the steering until beyond the military mooring buoys at Giardini. A tug will be compulsory for those steam vessels which have inflammables or explosives on board, when required by the Captain of the Port.

Steam vessels are not allowed to pass one another in the channel.

Sailing vessels over 80 tons net are not allowed to navigate under sail in the channels, and those of less than 80 tons must leave the fairway clear for steam vessels and their tugs, anchoring or mooring on the side of the channel if necessary; any warping lines used must not obstruct navigation. The mooring posts in the channels and along the banks are fixed and assigned by the Port Harbour master. Mooring cables which present any danger to vessels should be marked during the day by a noticeable mark, and at night by a *white* light.

A copy of these regulations, and also those affecting local steam and motor craft, will be shown to the masters of vessels by the pilots.

The regulations must be strictly carried out.

PORT CHIOGGIA.—Depths.—The depths on the bank fronting the entrance to the port have decreased (1912), and caution is necessary in crossing it.

Page 84.—Harbour works.—Breakwaters are being constructed eastward from the spur of the bank eastward of Fort San Felice and from Fort Caroman breakwater. The passages between the light-buoys marking the outer ends of the breakwater works and the shore are dangerous.

Mooring buoys.—Five mooring buoys for torpedo vessels, and one for a vessel of moderate size, are established in the port.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—Fort San Felice.—A *white flashing* light *every two and a half seconds* (flash, *half a second*) is exhibited, at 52 feet above high water, from a white octagonal tower, over a red house, 24 feet high, in Fort San Felice, and should be seen from a distance of 11 miles.

Fort Caroman breakwater.—A *green occulting* light *every five seconds* (eclipse, *one and a half seconds*) is exhibited, at 26 feet above high water, from a cylindrical reservoir, painted red and white in horizontal stripes, on a masonry base, 20 feet high, on the outer end of Fort Caroman breakwater, and should be seen from a distance of 10 miles. The light is unwatched.

Page 84 continued. Plan 1483.

San Domenico canal.—A *red fixed* light is exhibited, at 25 feet above high water, from an iron standard, 21 feet high, at the Health office, on the eastern side of the north entrance to San Domenico canal, and should be seen from a distance of one mile; it is unwatched.

Light-buoys.—South breakwater.—A red light-buoy, exhibiting a *red flashing* light *every three seconds* (flash, *three-tenths of a second*) is moored about $1\frac{2}{10}$ miles east-south-eastward of Fort San Felice lighthouse, and marks the outer end of the works in progress for the construction of the South breakwater.

North breakwater.—A black light-buoy, exhibiting a *green flashing* light *every three seconds* (flash, *three-tenths of a second*) is moored about a mile east-south-eastward of Fort Caroman breakwater, and marks the outer end of the works in progress for the construction of the North breakwater.

Chart 201, Gulfs of Venice and Trieste.

Spoil buoy.—The spoil buoy is a red conical buoy, surmounted by a staff and ball.

Plan 1483, Ports Chioggia, Malamocco, and Lido.

Buoys.—A conical buoy, painted black and white in horizontal stripes, and surmounted by a cone, marks the sandbank about a cable westward of S. Felice fort.

A spherical buoy, surmounted by a cone painted white and black in horizontal stripes, is moored about 4 cables west-north-westward of Fort San Felice lighthouse.

Page 86.—Port Malamocco.—Beacons.—*Cancel* "A beacon is charted about one cable within the extreme of this spit in about 3 fathoms."

Wireless telegraph.—*Cancel* paragraph.

Page 87.—LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—South breakwater.—A *red flashing* light *every five seconds* (flash, *one second*) is exhibited, at 52 feet above high water, from a concrete tower, 45 feet high, on the outer extremity of the South breakwater at Port Malamocco, and should be seen from a distance of 12 miles.

North breakwater.—A *green flashing* light *every five seconds* (flash, *one second*) is exhibited, at 41 feet above high water, from an octagonal building, 34 feet high, on the outer extremity of the North breakwater of Port Malamocco, and should be seen from a distance of 12 miles.

Fog signal.—A siren, worked by compressed air, gives *three* blasts *every fifty-two and a half seconds*, thus:—blast, *two and a*

Page 84 continued. Line 1881.

San Domenico canal.—A red iron light is established, at 25 feet above high water, upon an iron structure, 21 feet high, at the lighthouse office, on the eastern side of the north entrance to San Domenico canal, and should be seen from a distance of one mile if it is unobstructed.

Light-buoys.—South breakwater.—A red light-buoy, exhibiting a red revolving light every three seconds (flash, half-second; eclipse, two seconds), is moored about 1½ miles eastward of Fort San Felipe lighthouse, and marks the outer end of the works in progress for the construction of the South breakwater.

North breakwater.—A third light buoy, exhibiting a green revolving light every three seconds (flash, one-third second; eclipse, two and two-thirds seconds), is moored about a mile eastward of Fort Clarence, in deep water, and marks the outer end of the works in progress for the construction of the North breakwater.

Page 86, Office of Trade and Navigation.

Spoil buoy.—The spoil buoy is red and black in horizontal bands, with a star and bell.

Page 87, Fourth Lighthouse District.

Buoys.—A iron spar buoy, painted black and white in horizontal stripes, and surmounted by a cone, marks the southern extremity of a reef of S. Felipe Key.

A spherical buoy, surmounted by a cone, painted white and black in horizontal stripes, is moored about 1 mile eastward of Fort San Felipe lighthouse.

Page 88.—**Port Malanzoco.—Beacons.**—[illegible] is moored about one mile within the entrance of this port, [illegible] a lantern."

Wireless telegraph.—[illegible] paragraph.

Page 87.—**LIGHTS.**—[illegible] and substitute:

LIGHTS.—South breakwater.—A red revolving light, one second (flash, one-third second), is established, at 32 feet above high water, from a concrete tower, 41 feet high, on the outer extremity of the South breakwater at Fort Malanzoco, and should be seen from a distance of 12 miles.

North breakwater.—A green revolving light, one second (flash, one-third second), is established, at 31 feet above high water, from an octagonal building, 41 feet high, on the outer extremity of the North breakwater of Fort Malanzoco, and should be seen from a distance of 12 miles.

Fog signal.—A [illegible] operated by compressed air, gives three blasts every 30 seconds, and is heard [illegible] miles.

Page 87 continued. Plan 1483.

half seconds; interval, *two and a half seconds;* blast, *two and a half seconds;* interval, *two and a half seconds;* blast, *two and a half seconds;* interval, *forty seconds.*

San Pietro fort mole.—Two *fixed* lights, placed vertically, the upper *red* and the lower *white*, are exhibited, at 30 and 23 feet above high water, from an iron framework, 30 feet high, on the outer end of the mole extending northward from the western end of San Pietro fort; the *red* light should be seen from a distance of 6 miles, and the *white* light of 9 miles.

Rocchetta.—A *white flashing* light *every thirteen seconds* (flash, *three seconds*) is exhibited, at 81 feet above high water, from a white cylindrical tower over dwelling, 76 feet high, on the sea wall south-westward of Fort Alberoni, and should be seen from a distance of 14 miles.

Spignon.—A *red occulting* light *every five seconds* (eclipse, *two seconds*) is exhibited, at 49 feet above high water, from a white conical tower, 43 feet high, with a dwelling adjoining, situated on the southern side of Spignon channel entrance, and should be seen from a distance of 7 miles.

Spignon and Rocchetta lights in line, N. 66° W., lead between the moles.

Light-buoy.—A black light-and-bell-buoy, exhibiting a *red fixed* light, is moored in Port Malamocco entrance, about 4 cables westward of the North breakwater lighthouse, and just inside a patch with 3¼ fathoms water.

Pilots.—The pilot boats fly a blue-white-blue flag at the masthead, and have the letter P on the sails, and the word "Pilota" on the bow and stern.

Mooring buoys.—*Cancel* paragraph.

Page 88.—The population of Venice by the census of 10th June, 1911, was 158,423.

Consulate.—*Cancel,* and *substitute*:—

A British Vice-Consul is stationed at Venice.

Trade.—In 1911 the total value of the imports, as registered at the Custom house, was £10,267,730, and of the exports £5,785,558.

In 1912, 2,173 steam vessels, of 2,114,289 tons, and 1,998 sailing vessels, of 117,304 tons, entered the port.

Docks.—*See* Appendix.

Page 89.—TIME SIGNAL.—*Cancel* paragraph, and *substitute*:—

TIME SIGNALS.—A group of six electric lights at the eastern turret of San Giorgio island, about 82 feet above the ground, is

Page 89 continued. Plan 1483.

switched on at noon standard time, or 23h. 0m. 0s. Greenwich mean time, and switched off at 0h. 5m. 0s. standard time, or 23h. 5m. 0s. Greenwich mean time. The signal should be seen from a distance of about 3 miles.

A similar signal is made from the north wall of the highest part of Sylos factory at the Naval station.

Page 90.—Directions.—*Cancel* the first paragraph of section, and *substitute*:—

In making Malamocco in hazy weather, the entrance is seldom first seen, as the lighthouses are then not easily distinguished. In clear weather, by day, the buildings of Venice may be seen. The most conspicuous object to the northward of the port is the pilot tower (page 86); about 2 cables westward from the tower is a quoin-shaped clump of trees. To the southward are the church of San Pietro in Volta and Porto Secco, with short belfries.

Cancel the third paragraph of section and *substitute*:—

Enter between the breakwaters with Spignon and Rocchetta lighthouses in line, N. 66° W., and keep this mark on, which leads northward of the light-and-bell-buoy, until Fort San Pietro mole lighthouse bears S. 67° W.; and thence keep in mid-channel. There is a least depth of 5 fathoms in this route, but with extraordinary low tides there may be a foot less water. When within Fort San Pietro mole steer for the anchorage.

Page 91.—Anchorage.—Mooring buoys for large and small vessels have been placed in San Marco and Guidecca channels.

Wireless telegraph.—*Cancel* paragraph.

Spoil buoy.—*Cancel* paragraph, and *substitute*:—

Spoil buoy.—A red conical buoy, surmounted by a ball, is moored about $3\frac{3}{4}$ miles east-north-eastward of Malamocco North breakwater lighthouse to mark the place for deposit of spoil.

Measured distance.—North-eastward of Port Malamocco is a measured distance of 15,306 feet, or $2\frac{1}{2}$ miles nearly; the running mark is San Pietro in Volta steeple in line with the South breakwater lighthouse, S. 54° W.; the south-western limit mark is Poveglia and Malamocco steeples in line; and the north-eastern limit mark San Giorgio and San Lazzaro steeples in line; the depth on the course is from $5\frac{1}{2}$ to 6 fathoms.

Page 92.—PORT SAN NICOLO DEL LIDO.—Depths.—The entrance channel is from about $3\frac{1}{2}$ to 2 cables wide, decreasing to about one cable northward of Fort San Nicolo.

LIGHTS.—South-west breakwater.—A *red group flashing* light *every eight seconds*, showing groups of *two* flashes of *one and a half seconds* each, eclipse between flashes *one second*, between

Page 89 continued.—See Page 90.

-witched on at noon standard time, or 1 h. 0m. 0s. Greenwich mean time, and switched off at 0h. 5m. 0s. standard time, or 23h. 5m. 0s. Greenwich mean time. The signal should be seen from a distance of about 3 miles.

A similar signal is made from the north wall of the highest part of Sylee factory at the Naval station.

Page 90.—Directions.—*Insert the first paragraph as follows, and modify the*:—

In making Alofaloofoo in hazy weather, it is necessary to select first, as the lighthouses are often not easily distinguished. In clear weather, by day, the buildings of Vaitele may be seen. The most conspicuous object in the neighbourhood of the port is the pilot tower place 589 about 2 miles westward from the tower is a quadrangular clump of trees. To the southward are the towers of San Pietro in Vaitele and Porto Seuro, with white buildings.

Insert the third paragraph of section and substitute:—

Enter between the breakwaters with Spiegon and Teodorita lighthouses in line, N. 68° W., and keep this mark on, which lows north-ward of the light and dwelling, until Port San Pietro mole light bears S. 67° W., and then keep in mid-channel. There is a least depth of 5 fathoms in this course, but with extraordinary low tide there may be a foot less water. When within Port San Pietro take care for the rocks.

Page 91.—Anchorage.—*Omitting those for Vaitele and small vessels, insert the following in the Mole and Harbour of Alofaloofoo*:—

Wireless telegraph.—*Insert paragraph*:—

Spoil buoy.—*Insert paragraph and substitute*:—

Spoil buoy.—A red conical buoy, numbered 1, is moored about 27 miles, [illegible] of Alofaloofoo North breakwater lighthouse, or more to port on exposed of spoil.

Measured distance.—North-eastern of Port Malaccoola is a measured distance of 10,000 feet, or 1½ miles, marking the mouth of San Pietro in Vaitele steeple in line with the North breakwater lighthouse, N. 14° W.; the westernmost [illegible] is Porcupine and Malaccoola steeples in line; on the [illegible] Malaccoola and San Leonardo steeples in line; the [illegible] is the [illegible] of 1½ fathoms.

Page 92.—PORT SAN NICOLO DEL LIDO.—Depths.—*The entrance channel is from [illegible] to [illegible] with [illegible] in [illegible] the [illegible] of Port San Nicolo.*

LIGHTS.—South-west breakwater.—*A red [illegible] flashing light [illegible] at intervals of [illegible] seconds, at the [illegible] of a [illegible] [illegible] [illegible] [illegible]*

Page 92 continued. Plan 1483.

groups *four seconds,* is exhibited, at 20 feet above high water, from a red framework on the outer end of the South-west breakwater.

North-east breakwater.—A *green group flashing* light *every eight seconds,* showing groups of *two* flashes of *one and a half seconds* each, eclipse between flashes *one second,* between groups *four seconds,* is exhibited, at 56 feet above high water, from an octagonal two-storied concrete tower, with a domed top, and a double verandah on the seaward side, 56 feet high, on the outer end of the North-east breakwater, and should be seen from a distance of 7 miles.

Leading lights.—An *occulting* light *every five seconds* (eclipse *one and a half seconds*), showing *red, white,* and *green sectors,* is exhibited, at 70 feet above high water, from an iron framework on the south-east coast of Murano island, and should be seen from a distance of 13 miles. For the sectors of the light, *see* plan.

A *white occulting* light *every two seconds* (eclipse, *one second*) is exhibited, at 26 feet above high water, from a concrete beacon on the north bank of the channel about 3 cables northward of Fort San Nicolo semaphore, and should be seen from a distance of 10 miles.

The two last-mentioned lights are 3,460 yards apart, and in line, bearing N. 51° W., lead into the entrance to the port.

Channel lights.—A *green flashing* light *every four seconds* (flash, *one second*) is exhibited from the same concrete beacon as the *white occulting* light just mentioned.

A *green flashing* light *every four seconds* (flash, *one second*) is exhibited from a concrete beacon about $1\frac{1}{2}$ cables north-eastward of Fort S. Andrea.

A *red flashing* light *every four seconds* (flash, *one second*) is exhibited from a concrete beacon on the south bank of the channel, $1\frac{2}{10}$ cables northward of Fort San Nicolo semaphore.

A *red flashing* light *every four seconds* (flash, *one second*) is exhibited from a concrete beacon on the south bank of the channel, $2\frac{1}{2}$ cables north-westward of Fort San Nicolo semaphore.

BUOYS.—*Cancel* section, and *substitute*:—

Light-buoys.—A light-buoy is moored about 7 cables south-eastward of the south-western breakwater lighthouse, and three light-buoys are moored on the south-western side of the channel between the breakwaters. These buoys, each of which is surmounted by a red cone, and exhibits a *red flashing* light *every four seconds* (flash, *one second*), are left on the port hand entering.

Four light-buoys, each of which is surmounted by a black cone, and exhibits a *green flashing* light *every four seconds* (flash, *one second*), are moored on the north-eastern side of the channel, and are left on the starboard hand entering.

Page 34 continued. Page 35.

group four seconds, is exhibited, at 32 feet above high water, from a red framework on the outer end of the South-west breakwater.

North-east breakwater.—A revolving flashing light every eight seconds, showing groups of two flashes of one and a half seconds each, eclipse between flashes one second, between groups four seconds, is exhibited, at 36 feet above high water, from an octagonal two-storied concrete tower, with a domed top, and a double verandah on the seaward side, 36 feet high, on the outer end of the North-east breakwater, and should be seen from a distance of 7 miles.

Leading lights.—An occulting light every five seconds (eclipse one and a half seconds), showing red, white, and green sectors, is exhibited, at 70 feet above high water, from an iron framework on the south-east coast of Mauritius Island, and should be seen from a distance of 13 miles. For the sectors of the light, see plan.

A white occulting light every five seconds (eclipse one second) is exhibited, at 32 feet above high water, from a concrete beacon on the south bank of the channel about 3 cables northward of Fort San Xiloto entrance, and should be seen from a distance of 10 miles.

The two last-mentioned lights are 1,417 yards apart, and in line bearing N. 31° W., lead into the entrance to the port.

Channel lights.—A green flashing light every four seconds (flash, one second) is exhibited from the same octagonal tower as the white occulting light just mentioned.

A green flashing light every four seconds (flash, one second) is exhibited from a concrete beacon about 11 cables southward of Fort San Xiloto.

A red flashing light every four seconds (flash, one second) is exhibited from a concrete beacon on the south bank of the channel, 11 cables northward of Fort San Xiloto entrance.

A red flashing light every four seconds (flash, one second) is exhibited from a concrete beacon on the south bank of the channel, 11 cables north-westward of Fort San Xiloto entrance.

BUOYS.—(Lateral system, and substitutes.)

Light-buoys.—A light-buoy is moored about 7 cables seaward and to the south-westward of the Lighthouse. Lighthouse, and three light-buoys are moored on the southward and eastward side of the channel between the breakwaters. These buoys, each of which is surmounted by a red cone, and exhibits a red flashing light every four seconds (flash, one second), are left on the port-hand entering.

Four light-buoys, each of which is surmounted by a black cone, and exhibits a green flashing light every four seconds (flash, one second), are moored on the south-westward side of the channel, and are left on the starboard-hand entering.

Page 92 continued. Plan 1483.

Mooring buoys.—Four buoys have been placed about 130 yards north-eastward, eastward, southward, and south-westward from the head of the South-western breakwater, for mooring boats landing material for completing the breakwater.

Buoy.—A black spherical buoy, surmounted by a cone, painted black and white in horizontal stripes, is moored about a mile eastward of Fort San Nicolo semaphore to mark the bank between Lido and Treporti channels.

NOTE.—Buoys inside Fort San Nicolo are not mentioned herein, nor are they shown on the plan.

Dredging operations are in progress in Port Lido channel; the dredger, which exhibits the "Not under control" signal, is moored ahead and astern in the direction of the streams, and can be passed on either side at the slowest possible speed. In heavy weather, the dredger will go into S. Nicolo del Lido road or S. Marco channel.

Regulations for entering.—*Cancel* paragraph. *See* page 83.

Page 93.—In margin: *For* "Plan 1413 [794]" *read* "Plan 1483."

Chart 201, River Po to Cape Promontore.

Piave Vecchia.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white occulting* light *every twelve seconds* (eclipse *two seconds*) is exhibited, at 146 feet above high water, from a white circular tower over a dwelling, 136 feet high, situated on the western entrance point of Port Piave Vecchia, and should be seen from a distance of 18 miles. The lighthouse is a telegraph station. View on chart 201.

Page 94.—Caorle.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white occulting* light *every seven and a half seconds* (eclipse, *two and a half seconds*) is exhibited, at 41 feet above high water, from Caorle church steeple, and should be seen from a distance of 10 miles.

Port Falconera.—Lights.—A *red fixed* light is exhibited, at 19 feet above high water, from a lamp-post on the western side of the entrance to the port.

A *green flashing* light *every five seconds* (flash, *one second*) is exhibited, at 19 feet above high water, from an iron post on the shoal on the eastern side of the entrance to the port.

These lights should be seen from a distance of 5 miles.

Page 95.—Tagliamento point.—LIGHT.—A *white occulting* light *every twenty seconds* (eclipse, *ten seconds*) is exhibited, at 72 feet above high water, from a white circular tower over a two-

Page 95 continued. Chart 201.

storied house, situated on Tagliamento point, and should be seen from a distance of 14 miles.

Page 96.—*Cancel* first paragraph, and *substitute*:—

Five conical buoys are placed, about one mile off-shore and some 7 cables apart, from eastward of Port Lignano entrance to westward of Port Buso entrance, and mark the fishery limits.

CHAPTER IV.

Chart 1434, Gulf of Trieste.

Page 97.—Port Buso.—*Cancel* section, and *substitute*:—

Port Buso communicates with and receives the waters of the Anfora, Ausa, and Indermur rivers, but is only suitable for small coasters, which go through the channels to Cervignano, an Austrian village, about 10 miles up the River Ausa, or to Port San Giorgio di Nogaro, in Italian territory.

The banks extending three-quarters of a mile off the entrance have less than 6 feet water, but a narrow channel, with 1½ fathoms least water, leads into the port, where there are depths of from 2¾ to 4¾ fathoms. Marano steeple, about 5 miles north-westward, and Grado steeple, 5½ miles south-eastward, are good marks. There is an Italian Custom house, with a long wooden landing jetty extending northward from it, on the western side of the port, and an Austrian Custom house, with a wooden jetty westward of it, on Port Buso island, on the eastern side, and a little further seaward.

LIGHT.—*Cancel* paragraph, and *substitute*:—

Light.—A *fixed* light, showing *red* and *white* sectors, is exhibited, at 15 feet above high water, from a post 9 feet high, at the head of the jetty on Port Buso island; the *white* light should be seen from a distance of 4 miles, and the *red* light of 3 miles. For the limits of the sectors, *see* Light list and charts 1434 and 201.

Buoys.—A white can buoy, surmounted by a cone, point downwards, is moored in 2¾ fathoms on the eastern side of the entrance to the port. On the same side of the entrance channel are a group of piles and three red spar buoys. The buoys and the piles are left on the starboard hand entering.

Outer anchorage.—There is open anchorage in about 4½ fathoms water with the Austrian Custom house bearing N. 22° W., distant 2½ miles.

Caution.—It is not safe to enter or leave the port during fresh south-easterly winds, as there are then heavy breakers at the entrance.

Supplies.—No provisions can be obtained at the port, but they are procurable from Marano (about 1½ hours by boat with a favour-

Page 97 continued. Chart 1434.

able stream). There are some artesian wells with good but somewhat ferruginous water near the Italian Custom house.

Communication.—A small Austrian steamer runs weekly between Cervigano and Trieste.

Page 98.—The passage leading into Port Grado has been dredged to a depth of 10 feet.

Lights.—The *red fixed* light on the eastern side of the entrance to Port Grado should be seen from a distance of 5 miles.

Harbour lights.—*Cancel* paragraph, and *substitute*:—

Harbour lights.—A *red fixed* light is exhibited, at 15 feet above high water, from the head of the embankment northward of Grado village, and should be seen from a distance of 3 miles; it is unwatched.

A *white fixed* light is exhibited, at 21 feet above high water, from the southern end of the eastern embankment at the entrance to Belvedere channel, and should be seen from a distance of 5 miles; this light cannot be lighted in heavy weather; it is unwatched.

Buoys.—The entrance channel into Port Grado is marked by three red spar buoys, which are left on the starboard hand entering, and by two black conical buoys, which are left on the port hand entering. The buoys are additional to the piles.

Signals.—Traffic signals are shown daily, from sunrise to sunset, from a signal mast at the northern entrance to the harbour channel.

Port Primero.—The tower near the shore half a mile to the right of the entrance has been demolished.

Page 99.—Port Rosega.—The speed of steamers in the channel between Port Rosega and Monfalcone city must not exceed 2 knots until new regulations.

Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *green flashing* light *every three seconds* (flash, *one second*) is exhibited, at 23 feet above high water, from a red iron post with platform above a red cylindrical hut, 18 feet high, on the East molehead of Port Rosega, and should be seen from a distance of 4 miles; the light is unwatched.

Light-buoy.—A white light-buoy, exhibiting a *red fixed* light, is moored on the western side of the entrance to the western approach channel into Port Rosega.

Port Duino.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *fixed* light, showing *white* and *red* sectors, is exhibited, at 19 feet above high water, from a green lamp-post, 9 feet high, on the head of the mole; the *white* light should be seen from a distance

[illegible]

side-stream). There are some arrangements with good fair soundings at [illegible] water near the Italian system forts.

Communication.—A small [illegible] between Cervignano and Trieste.

Page 28.—The passage leading into Port [illegible] has been dredged to a depth of 10 feet.

Lights.—The red and white light on the eastern side of the entrance to Port Grado should be seen from a distance of 5 miles.

Harbour lights.—[illegible]

Harbour lights.—A red and white light is exhibited at 15 feet above high water, from the head of the embankment towards Grado village, and should be seen from a distance [illegible] when [illegible].

A white fixed light is exhibited at 21 feet above high water from the northern end of the eastern embankment at the entrance to Belvedere channel, and should be seen from a distance of 5 miles; this light cannot be lighted in heavy weather if it is unwatched.

Buoys.—The entrance channel to Port Grado is marked by three red spar buoys, which are left on the starboard hand entering, and by two black conical buoys, which are left on the port hand entering. The buoys are additional to the piles.

Signals.—Traffic signals are shown daily, [illegible] to sunset, from a signal mast at the northern entrance to the harbour channel.

Port Primero.—The tower near the place half a mile to the right of the entrance has been demolished.

Page 29.—Port Rosega.—The speed of steamers in the channel between Port Rosega and Monfalcone city [illegible] exceed 3 knots [illegible] regulations.

Light.—[illegible]

Light.—A green flashing light among [illegible] (among) is established at 32 feet above high water from a red iron post with platform above a red cylindrical lamp, 15 feet high, on the E.N.E. breakwater of Port Rosega, and should be seen from a distance of [illegible] the light is unwatched.

Light-buoy.—A white light-buoy [illegible] is moored on the western side of the entrance to the [illegible] channel into Port Rosega.

Port Duino.—Light.—[illegible]

Light.—A red fixed sphere [illegible] is established 15 feet above high water, from a green iron [illegible] on the head of the mole; the white light should be [illegible]

Page 99 continued. Chart 1434.

of 4 miles, and the *red* light of 3 miles. The light is unwatched. For the limits of the sectors, *see* Light list.

The *red* sector covers the shoal which extends off the mouth of Timavo river.

Page 100.—Sistiana bay.—Harbour lights.—*Cancel* paragraph, and *substitute*:—

Light.—A *green fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 16 feet high, on the head of the East mole, and should be seen from a distance of one mile; it is unwatched and unreliable.

Barcola.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *red fixed* light is exhibited, at 16 feet above high water, from a green lamp-post, 13 feet high, situated on the head of a small mole at Barcola, and should be seen from a distance of 4 miles. The light is unwatched, and is unreliable in south-westerly gales. Barcola is situated about a mile northward of the northern end of the northern breakwater of Trieste harbour.

Plan, Trieste harbour, on chart 1434.

TRIESTE.—The population of Trieste, according to the census of 31st December, 1910, was 227,652, and a garrison of 3,052 men.

Page 101.—Trade.—In the year 1912, 12,144 steam vessels, of 6,907,790 tons, and 2,118 sailing vessels of 113,986 tons entered the port.

In the same year, the value of the imports was £60,547,000, and that of the exports £57,700,000.

TRIESTE HARBOUR.—First paragraph: *Cancel* "works are in progress north-westward of the molehead," and *substitute*:

There is a boat harbour on the western side of the mole; it is to be extended, and several buoys will be placed within about 275 yards westward of the mole for mooring boats employed on the work.

Third paragraph: There are five projecting moles in the south-eastern part of the harbour.

Page 102.—Harbour works in progress.—*Cancel* paragraph, and *substitute*:—

Franz Josef hafen.—The coast from Santa Teresa mole to the Petroleum pier, on the northern side of Muggia bay, is embanked and forms an extensive line of quayage, from the northern part of which three moles will extend westward; the two northern are completed. Franz Josef hafen, in which are depths of from 9 to 10 fathoms, lies between these moles and three detached breakwaters. The two northern of these breakwaters are each a quarter of a mile long, and the southern 8 cables long; they trend north and south, and are placed "en echelon" 1½ cables apart, the northern breakwater being 2 cables westward of the northern mole, and the southern breakwater

Page 102 continued. Plan on chart 1434.

three-quarters of a mile westward of the southern mole. The two northern breakwaters and a portion of the southern are above water. Vessels passing between these breakwaters must use caution.

Buoys.—*Cancel* paragraph, and *substitute*:—

Buoys.—There are several mooring buoys in the harbours.

Prohibited area.—*Cancel* paragraph.

Pages 102, 103.—LIGHTS.—*Cancel* section, including Fog signal and New harbour, and *substitute*:—

LIGHTS.—Old harbour.—A *white flashing* light *every thirty seconds* (flash, *thirteen seconds*) is exhibited, at 110 feet above high water, from a grey circular stone tower, 103 feet high, on Santa Teresa molehead (view on chart 1434), and should be seen from a distance of 16 miles.

Giuseppina mole.—A *green fixed* electric light is exhibited, at 19 feet above high water, from a red lamp-post, 17 feet high, on the head of Giuseppina mole, in the old harbour, and should be seen from a distance of 4 miles; it is unwatched.

New harbour.—Breakwater, north end.—Two *green fixed* electric lights, placed vertically, 19 and 15 feet above high water, are exhibited from a mast over a shed, 13 feet high, on the north end of the detached breakwater, and should be seen from a distance of 2 miles.

Breakwater.—Inner arm.—A *red fixed* light is exhibited, at 12 feet above high water, from a lamp-post, 11 feet high, on the inner arm of the detached breakwater, nearly a cable from its north end, and should be seen from a distance of one mile.

Breakwater, south end.—Two *red fixed* electric lights, placed vertically, 19 and 15 feet above high water, are exhibited from a mast over a shed, 13 feet high, on the south end of the detached breakwater, and should be seen from a distance of 3 miles.

Franz Joseph hafen.—No. 5 mole.—A *red fixed* light is exhibited at 22 feet above high water, from an iron candelabrum, 16 feet high, on each corner of No. 5 mole, and should be seen from a distance of 2 miles. These lights are not lit in north-easterly gales.

North breakwater.—North end.—A *white group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 25 feet above high water, from a red pillar over a hut, 25 feet high, on the north end of the northern breakwater, and should be seen from a distance of 9 miles.

Fog signal.—A steam horn, placed in a hut on the north end of the northern breakwater, gives one *long* blast followed by four *short* blasts *every thirty seconds.*

[illegible]

Buoys.—[illegible] intagraph, and [illegible].

Buoys.—Then are several floating buoys in the harbour.

Prohibited area.—[illegible].

Pages 102, 103.—LIGHTS.—[illegible], including the old and new harbour, and [illegible].

LIGHTS.—Old harbour.—[illegible] high water [illegible] 11 feet above high water, from a grey conical stone tower, 20 feet high on [illegible]. These [illegible] harbour lights, and should be seen from a distance of 12 miles.

Ginneppina mole.—[illegible] 11 feet above high water, from a red lantern, 11 feet high, on the head of Ginneppina mole, in the old harbour, and should be seen from a distance of 4 miles; it is now [illegible].

New harbour.—Breakwater, north end.—[illegible] good electric light, [illegible] varying, 18 feet above high water, and exhibited from a [illegible] 11 feet high, on the centre end of the detached breakwater, and should be seen from a distance of 5 miles.

Breakwater.—Inner arm.—A red [illegible] light is exhibited, at 18 feet above high water, from a [illegible] 11 feet high, on the inner arm of the detached breakwater, nearly a mile from its north end, and should be seen from a distance of one mile.

Breakwater, south end.—Two red [illegible] lights, [illegible] vertically, 18 and 11 feet above high water, are exhibited from a red [illegible] 11 feet high, on the south end of the detached breakwater, and should be seen from a distance of 3 miles.

Prince Joseph baton.—No. 5 mole.—A red [illegible] light is exhibited at 22 feet above high water, from an iron cylindrical tower [illegible], on each corner of No. 5 mole, and should be seen from a distance of 3 miles. These lights are not in [illegible].

North breakwater.—North end.—A [illegible] light, showing a group of two flashes every [illegible], is exhibited, at 22 feet above high water, from a red pillar over a [illegible], 20 feet high, on the north end of the northern breakwater, and should be seen from a distance of 3 miles.

Fog signal.—A steam horn, placed in a hut on the north end of the northern breakwater, also one horn [illegible] should be seen about [illegible] miles.

Pages 102 and 103 continued. Plan on chart 1434.

South end.—Two *fixed* lights, placed vertically, the upper *red*, at 31 feet, and the lower *white*, at 24 feet, above high water, are exhibited from a grey iron support, 36 feet high, on the south end of the northern breakwater; the *red* light should be seen from a distance of 5 miles, and the *white* light of 8 miles.

Middle breakwater.—North end.—A *green fixed* light is exhibited, at 30 feet above high water, from a grey iron structure, 25 feet high, on the north end of the middle breakwater, and should be seen from a distance of 6 miles.

South end.—A *red fixed* light is exhibited, at 30 feet above high water, from a grey iron structure on the south end of the middle breakwater, and should be seen from a distance of 7 miles.

South breakwater.—South end.—A *white occulting* light *every four seconds* (eclipse, *two seconds*) is exhibited, at 30 feet above high water, from a grey pillar, with a platform, over a hut, 25 feet high, and should be seen from a distance of 10 miles.

The lights exhibited from the breakwaters of Franz Joseph hafen are unwatched.

Page 103.—Directions.—Anchorage.—*Cancel* paragraph, and *substitute*:—

Mooring buoys.—There are several mooring buoys near the jetties (*see* plan on chart 1434); though generally used by small vessels, their anchors are heavy.

Anchorage.—Large vessels can moor, in about 10 fathoms water, northward of Santa Teresa mole lighthouse and westward of the New harbour breakwater.

Regulations.—Steam vessels entering or leaving Trieste harbour, when eastward of the line between Santa Teresa mole and the northern end of the breakwater of the New harbour, must reduce speed.

Steam vessels from Muggia, Capo d'Istria, Isola, and Pirano bays must, when entering Trieste harbour, pass close to Santa Teresa mole lighthouse, whilst those outward bound for these bays must pass not less than 160 yards from the lighthouse.

Directions.—To enter Franz Joseph hafen from the northward pass eastward of the light-beacon on the north end of the northern breakwater, and between the light-beacon on the southern end of that breakwater and No. 5 mole to the eastward.

Tides.—*Cancel* paragraph, and *substitute*:—

Tides.—It is high water, full and change, at Trieste, at IXh. 30m.; springs rise 2¼ feet, neaps 1¼ feet.

[illegible]

South end.—[illegible] red light placed vertically, the upper one [illegible] feet, and the lower [illegible], at 20 feet above high water, [illegible] established from a gray iron support, 20 feet high, on the south end of the northern breakwater; the red light should be seen from a distance of 5 miles, and the white light [illegible] miles.

Middle breakwater.—North end.—A green and red light [illegible] established, at 20 feet above high water, on a gray iron structure, 20 feet high, on the north end of the middle breakwater, and should be seen from a distance of 5 miles.

South end.—A red and white light [illegible] established, at [illegible] feet above high water, from a gray iron structure on the south end of the middle breakwater, and should be seen from a distance of 5 miles.

South breakwater.—South end.—A white [illegible] at 20 feet above high water, from a gray iron structure [illegible] established, at 20 feet above high water, from a gray pillar with a [illegible] on it, 20 feet high, and should be seen from a distance of [illegible] miles.

The lights established on the breakwaters [illegible] Sandy Hook [illegible] established.

Page 104.—Directions.—Anchorage.—[illegible] prevailing [illegible]

Flowing Bridge.—[illegible] flowing bridge [illegible] plan on that [illegible] generally used by small craft, which anchors are [illegible].

Anchorage.—[illegible] anchorage [illegible] Tompkinsville, [illegible] at least three [illegible] anchorages [illegible] Sandy Hook.

Regulation.—[illegible] anchorage in Lower Bay [illegible] shore anchorage on the Jersey side [illegible] Staten Island and on the Long Island side of the New Jersey [illegible] shore.

[illegible] from Sandy Hook, [illegible] and [illegible] when entering Raritan Bay, [illegible] Sandy Hook [illegible] within three miles of Sandy Hook [illegible] than 100 yards from the lighthouse.

Directions.—In entering Raritan Bay, [illegible] the northward [illegible] of the lighthouse on the south end of the breakwater [illegible] leaving the lighthouse on the starboard and [illegible] the Flower and Kill Van Kull in the eastward.

Tides.—[illegible]

Tides.—[illegible] high water, full and change [illegible] [illegible] rising [illegible] feet [illegible].

Page 103 continued. Plan on chart 1434.

Wireless telegraph station.—A wireless telegraph station is established at Trieste, on Santa Teresa mole. It is open to the public at all times. The call letters are O.H.T.

Docks.—*See* Appendix to this Supplement.

Page 104.—Time signal.—*Cancel* paragraph, and *substitute*:—

Time signal.—A staff is fixed to the upper part of the northern side of Santa Teresa mole lighthouse (view on plan on chart 1434), and a black ball, 3 feet in diameter, is hoisted five minutes before the signal, and dropped at noon standard mean time, or 23h. 0m. 0s. Greenwich mean time. Should the signal be inaccurate, the ball will be hoisted to, and kept some time, half-way up.

A gun is fired at the instant of the dropping of the ball.

Barometer.—A barometer diagram, adjusted from time to time, is on the north-eastern side of Santa Teresa mole lighthouse.

Salvage plant.—An additional steam vessel has been added to the establishment.

Chart 1434, Gulf of Trieste.

Page 105.—Servola.—Light.—A *green fixed* light is exhibited, at 18 feet above high water, from a green lamp-post, 16 feet high, on Servola North-west molehead, and should be seen from a distance of 2 miles; it is unwatched.

Harbour lights.—*Cancel* second, third, and fourth paragraphs of section, and *substitute*:—

A *red fixed* light is exhibited, at 21 feet above high water, from a lamp-post, 16 feet high, on Muggia East molehead, and should be seen from a distance of 3 miles.

A *green fixed* light is exhibited, at 19 feet above high water, from a lamp-post, 18 feet high, on Muggia North-west molehead, and should be seen from a distance of 2 miles.

The lights are unwatched.

Page 106.—San Bartolomeo bay.—Light.—A *red fixed* light, with a *green* sector, is exhibited, at 21 feet above high water, from an iron post, 18 feet high, on the north-west angle of the quay in San Bartolomeo bay, 2¼ cables southward of Sottile point lighthouse; the *red* light should be seen from a distance of 3 miles, and the *green* of 2 miles.

For the sectors of the light, *see* Light list and chart, observing that the limits of the *green* sector just clear the shoals extending from Sottile and Grossa points. The light is unwatched.

Capo d'Istria.—Light.—A *red fixed* light is exhibited, at 14 feet above high water, from a green lamp-post, 13 feet high, on the

Page 106 continued. Chart 1434.

head of the boat harbour mole, on the northern side of the town, and should be seen from a distance of 2 miles; the light is unwatched.

Page 107.—Harbour lights.—*Cancel* section, and *substitute*:

Harbour lights.—A *red fixed* light is exhibited, at 19 feet above high water, from a green lamp-post, 15 feet high, on San Pietro rock, Gallo point, and should be seen from a distance of 3 miles.

A *green fixed* light is exhibited at 16 feet above high water, from a lamp-post 15 feet high, on Isola molehead, and should be seen from a distance of one mile; it is unreliable in north-easterly gales. The lights are unwatched.

Port Rose.—There is a telephone station here.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—A *red fixed* light is exhibited, at 33 feet above high water, from a house, 10 feet high, on the bastion of a fort on Madonna point, and should be seen from a distance of 8 miles.

For the arc of visibility, *see* Light list.

A *green fixed* light is exhibited, at 18 feet above high water, from a green lamp-post, 17 feet high, on Pirano northern molehead, and should be seen from a distance of 2 miles; it is unwatched.

A *red fixed* light is exhibited, at 15 feet above high water, from a green lamp-post, 16 feet high, on Pirano southern molehead, and should be seen from a distance of 3 miles; it is unwatched.

White lights are occasionally shown on and near the inner ends of the moles at Pirano.

Page 108.—*Cancel* first paragraph, and *substitute*:—

A *green flashing* light *every three seconds* is exhibited, at 27 feet above high water, from a red iron tower, 26 feet high, on San Bernardino point molehead, Port Rose, and should be seen from a distance of 4 miles; it is unwatched.

SALVORE POINT.—Fog signal.—*Cancel*, and *substitute*:—

Fog signal.—A steam fog horn gives *one* blast *every twenty-one seconds;* blast, *six seconds.*

Plan, Port Umago, on sheet 1559.

Page 109.—PORT UMAGO.—The entrance channel is being dredged to the depth of 16 feet.

LIGHTS.—Pegolotta point *white* light should be seen from a distance of 8 miles.

The *green fixed* light on Umago molehead should be seen from a distance of 2 miles. This light, and also the light exhibited from the small pier, are unwatched.

Page 106 continued. (Chart 1242).

head of the Port Harbour mole, on the northern side of the town, and should be seen from a distance of 2 miles; the light is unwatched.

Page 107.—Harbour lights.—Green sector, and added for:—

Harbour lights.—A red fixed light is exhibited, at 10 feet above high water, from a green lamp-post, 10 feet high, on San Pietro, near Gallo point, and should be seen from a distance of 5 miles.

A green fixed light is exhibited at 17 feet above high water, from a lamp-post 15 feet high, on Isola nuova, and should be seen from a distance of one mile; it is unwatched. In unfavourable weather lights are unwatched.

Port Rose.—There is a telephone station here.

LIGHTS.—Green sector, and added for:—

LIGHTS.—A red fixed light is exhibited, at 32 feet above high water, from a house, 10 feet high, on the bastion of a fort on Maestro point, and should be seen from a distance of 3 miles.

For the arc of visibility, see Light list.

A green fixed light is exhibited, at 12 feet above high water, from a green lamp-post, 17 feet high, on Punta Maestro northern mole, and should be seen from a distance of 2 miles; it is unwatched.

A red fixed light is exhibited, at 15 feet above high water, from a green lamp-post, 16 feet high, on Punta Maestro southern mole, and should be seen from a distance of 2 miles; it is unwatched.

Within lights are occasionally screened by fog and near the lower end of the mole at Punta.

Page 108.—Change that paragraph and add after:—

A green flashing light every three seconds is exhibited, at 27 feet above high water, from a iron tower, 22 feet high, on San Pietro-dino point molesta, Port Rose, and should be seen from a distance of 4 miles; it is unwatched.

SALVORE POINT.—Fog signal.—Change, and add after:—

Fog signal.—A steam fog horn gives one blast every twenty seconds; that, six seconds.

Then, Port Umago, on chart 1242.

Page 109.—PORT UMAGO.—The entrance channel is being reduced to the depth of 10 feet.

LIGHTS.—Hagiolita point white light should be seen from a distance of 8 miles.

The green fixed light on Umago molehead should be seen from a distance of 2 miles. This light, and also the light exhibited from the small pier, are unwatched.

Chart 201, Gulfs of Venice and Trieste.

Page 110.—Port Daila.—The post-office at Daila is connected by public telephone stations with the state telephone system.

Light.—A *red fixed* light is exhibited, at 19 feet above high water, from a lantern on a green lamp-post, 17 feet high, on Daila molehead, and should be seen from a distance of 3 miles; the light is unwatched.

Plan, Port Quieto, on sheet 1559.

CITTANUOVA.—The post and telegraph office at Cittanuova is connected by public telephone stations with the state telephone system.

The port.—*Cancel* "A mooring buoy lies half a cable North of the pier light."

Light.—*Cancel* paragraph, and *substitute*:—

Lights.—An *occulting* light, with *white* and *red* sectors, is exhibited, at 22 feet above high water, from a red iron pillar, 20 feet high, on the north-western end of Cittanuova quay; the *white* light should be seen from a distance of 7 miles, and the *red* light of 4 miles; the light is unwatched.

For the limits of the sectors of the light, *see* Light list and plan.

The *white* sector of the light leads between Val shoal and the $2\frac{3}{4}$-fathom extreme of the shoal water extending from Carpignan point.

A *green fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 15 feet high, on the head of the pier at the boat harbour at Cittanuova; it is unwatched.

Page 111.—*Cancel* second paragraph, and *substitute*:—

At night, keep in the *white* sector of Port Cittanuova light when in the obscured sector of Dente point light, to avoid Val shoal.

PORT QUIETO.—Mooring buoy.—A mooring buoy lies in $5\frac{1}{2}$ fathoms water about $1\frac{1}{4}$ cables south-westward of San Pietro point.

Plan, Port Parenzo, on sheet 1559.

Page 113.—Boat passage.—Owing to works in progress for reconstructing the breakwaters extending from San Nicolo island and Sarafel islet, this passage is closed until further notice.

LIGHTS.—The *green fixed* light exhibited from the Central mole in the southern side of the town should be seen from a distance of 3 miles; it is unwatched.

Plan, Ports Fontane and Orsera, on sheet 1559.

Page 114.—Marmi shoal.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *red flashing* light *every three seconds* is exhibited, at 31 feet above high water, from a red conical iron turret on a

Page 114 continued. Plan on sheet 1559.

masonry base, 31 feet high, on Marmi shoal, and should be seen from a distance of 6 miles; it is unwatched.

Piova bay.—Mooring buoy.—A mooring buoy is placed in Piova bay; it is private property, and used for mooring vessels taking stone from the local quarry.

Port Orsera.—Light.—The *white* light should be seen from a distance of 3 miles, and the *green* light of one mile; the light is unwatched.

Plan, Port Rovigno, on sheet 1559.

Page 115.—Valdibora bay.—There is a conduit of spring water on the shore of this bay.

Rovigno.—This town is connected with Pola by telephone.

Page 116.—Lights.—*Cancel* section, and *substitute*:—

Lights.—A *green fixed* light is exhibited, at 23 feet above high water, from a green lamp-post on the quay on the southern side of Valdibora bay, and should be seen from a distance of 4 miles.

A *red fixed* light is exhibited, at 59 feet above high water, from a white iron turret, 19 feet high, on Sta. Eufemia point, and should be seen from a distance of 5 miles.

A *green fixed* light is exhibited, at 19 feet above high water, from a green lamp-post, 17 feet high, on Salsanta molehead, Port Rovigno, and should be seen from a distance of 4 miles.

The above-mentioned lights show *white* towards the land, and are unwatched.

Chart 201, Gulfs of Venice and Trieste.

Pages 116, 117.—LIGHT.—San Giovanni di Pelago.—*Cancel* paragraph, and footnote on page 116, and *substitute*:—

A *white group flashing* light *every ten seconds*, showing a group of *two* flashes of *half a second* each, eclipse between flashes *two and a half seconds*, between groups *six and a half seconds*, is exhibited, at 75 feet above high water, from a white octagonal tower, 69 feet high, on the summit of San Giovanni islet, and should be seen from a distance of 14 miles. View on chart 201.

Fog signal.—In answer to a vessel's fog signal, a fog horn, worked by hand, gives a *short* blast followed by a *long* blast.

Plan 202, Port Pola and Brioni islands.

Page 117.—Barbariga.—Light.—A *green fixed* light is exhibited, at 10 feet above high water, from an iron lamp-post, 10 feet high, on Barbariga molehead, and should be seen from a distance of 2 miles. The light is unwatched.

Page 118.—LIGHTS.—Cabula shoal.—The light on Cabula shoal should be seen from a distance of 8 miles, but it is unreliable.

Page 114 continued. View on chart 1319.

necessary here, 31 feet high, on Mistral island, and should be seen from a distance of 6 miles; it is unwatched.

Piova bay.—Mooring buoy.—A mooring buoy is placed in Piova bay; it is private property, and used for mooring vessels taking stone from the local quarry.

Port Orsera.—Light.—The white light should be seen from a distance of 8 miles, and the green light of one mile; the light is unwatched.

View, Port Rovigno, on chart 1319.

Page 115.—Valdibora bay.—There is a jet of spring water on the shore of this bay.

Rovigno.—This town is connected with Pola by telephone.

Page 118.—Lights.—Correct section, and substitute—

Lights.—A green fixed light is exhibited, at 23 feet above high water, from a green lamppost on the quay on the southern side of Valdibora bay, and should be seen from a distance of 4 miles.

A red fixed light is exhibited, at 30 feet above high water, from a white iron tower, 19 feet high, on St. Nicola point, and should be seen from a distance of 5 miles.

A green fixed light is exhibited, at 19 feet above high water, from a green lamppost, 17 feet high, on Salvore redoubt, Port Stovica, and should be seen from a distance of 4 miles.

The above-mentioned lights show white towards the land, and are unwatched.

View 24, Ports of Pola and Fiume.

Pages 119, 117.—LIGHT.—San Giovanni di Pelago.—

Correct paragraph, and footnote on page 117, and substitute—

A white group flashing light every 5 seconds, showing a group of two flashes of half a second each, eclipse between flashes two and a half seconds, between groups six and a half seconds, is exhibited, at 75 feet above high water, from a white octagonal tower, 43 feet high, on the summit of San Giovanni islet, and should be seen from a distance of 14 miles. View on chart 24.

Fog signal.—In answer to a vessel's fog signal, a fog horn, worked by hand, gives a short blast followed by a long blast.

View 24, Port Fiume and Fiume island.

Page 117.—Barbariga.—Light.—A green fixed light is exhibited, at 10 feet above high water, from an iron lamppost, 10 feet high, on Barbariga redoubt, and should be seen from a distance of 2 miles. The light is unwatched.

Page 118.—LIGHTS.—Cabula shoal.—The light on this shoal should be seen from a distance of 3 miles, but it

Page 118 continued. Plan 202.

On Peneda (Pedena) point.—*Cancel* paragraph, and *substitute*:—

Peneda (Pedena) point.—A *white fixed* and *flashing* light *every thirty seconds*, thus:—fixed, *twenty-five seconds;* flash, *five seconds*, is exhibited, at 65 feet above high water, from a white square tower, 49 feet high, in the front part of a white dwelling, 40 yards inland from Peneda point, and should be seen from a distance of 14 miles. For the arc of visibility of the light, *see* Light list and plan. View on plan 202.

CANAL DI FASANA.—From about 12 cables west-north-westward of Fasana church, a patch of rocky ground extends 3 cables southward, with a breadth of about 2 cables.

Page 119.—Mooring buoys.—There are fifteen mooring buoys in two lines on the eastern side of Fasana channel.

LIGHTS.—A *white flashing* light, with a *red* sector, *every five seconds*, is exhibited from a concrete beacon about a cable east-north-eastward of Saluga point, and should be seen from a distance of 8 miles; it is unwatched. For the *red* sector of the light, *see* plan 202.

Floating beacons.—*Cancel* paragraph, and *substitute*:—

Buoys.—The east coast of Scoglio Grande is bordered by shallow water, and its edge off Rancon point is marked by a white conical buoy, surmounted by two cones, bases together, the upper red and the lower white.

A white conical buoy, surmounted by two cones, points together, the upper white and the lower black, is moored in 4¼ fathoms on the south-western side of Cosada shoal.

Page 120.—POLA.—Port.—Breakwater.—A breakwater is being constructed about three-quarters of a mile northward from Cape Compare; it is above water for nearly its whole length (May, 1914).

Inner harbour.—The passage between S. Andrea and S. Caterina islets is (1912) prohibited, dredging being in progress there.

Page 121.—Harbour regulations.—The war port district of Pola extends from Gustigna point, on the west, to Forticcio point, on the east, including the bays and harbours on, and the islands fronting the coast. It is prohibited to photograph or draw plans, &c., of structures in the territory of the war port.

The military port of Pola is between lines joining Cape Compare and Cristo point, on the west, and the arsenal and S. Pietro bay, on the east.

The commercial harbour is eastward of the military port.

Page 121 continued. Plan 202.

No merchant vessel is allowed to enter Vergarola bay, Zeno (Fisella) bay, Figo bay, Zonchi bay, the inner basin of Port S. Nicolo in Scoglio minor island, the bays of Bus, Lunga, Benedetto, Sanadigo, Antilena, Lago, Can, Terra alta, Ovina, Fuora, Saccorgiana, Cacoja, or Centinara, except in cases of distress or with special permission.

All merchant vessels are prohibited from approaching the ammunition establishment and wood preserves in Vallelunga, inside the line marked by buoys, joining the boundary stone near Aguzza point to the municipal baths, or to approach the equipment and construction arsenal.

All merchant vessels within a distance of one mile from the coast of the war port district can be required by the Captain of the Port to withdraw, except in cases of distress or if proceeding to the commercial port, when their national flag must be hoisted on approaching.

Foreign vessels of war must anchor in the outer harbour of the military port westward of a line joining Monumenti point with the outer end of the pier in Vergarola bay, in positions assigned them by the Captain of the Port.

Merchant vessels with petroleum on board must not approach the harbour at night nor touch at Pola unless such cargo is for that port, when it must be quickly transferred under official supervision to the allotted magazine.

Anchorage is prohibited in the area northward of S. Andrea island between lines drawn from Monumenti point to the south-west extreme of S. Andrea island, and from the south-east extreme of that island to Aguzza point.

A mooring buoy will be assigned to a vessel entering the war port by the guardship, but after obtaining pratique the vessel will proceed to her loading or discharging buoy. Vessels with stores for the dockyard or coal store will be berthed by the Chief of the Naval dockward, and vessels not granted pratique by the Captain of the Port.

All movements and mooring of vessels are carried out under the responsibility of their captains, except when an officer of the war navy, sent on board specially, assumes responsibility. Movements of vessels are not permitted without the consent of the war navy, except in unforeseen cases, which affect the security of the vessel or of the dockyard.

The anchorage.—*Cancel* paragraph, and *substitute*:—

The anchorage is good everywhere; the best berth is southward of Olivi islet in 11 fathoms water, mud bottom. There are several mooring buoys in the outer harbour. Small craft go alongside the quays of the town.

Foreign war vessels.—*Cancel* paragraph.

Page 121 continued. Plan 202.

Time signal.—*Cancel* section, and *substitute*:—

Time signals.—A rectangular shutter apparatus, about 6 feet square, on the roof of the Imperial Hydrographic Office, is closed daily at 5 minutes before noon standard mean time, and opened by hand in such a manner that the sky can be seen through the frame of the apparatus, at noon, or 23h. 0m. 0s. Greenwich mean time.

A gun at the Harbour castle is fired on the closing of the shutter at noon standard mean time.

Should either or both the signals be incorrect, the shutter will be closed one minute after the signal, and repeatedly opened and shut for the space of one minute.

When required by vessels of the Imperial Austrian Navy, the shutter is closed at 10h. 45m. a.m., and opened at 11h. 0m. 0s. standard mean time, or 22h. 0m. 0s. Greenwich mean time. Ten or more signals will follow the first at intervals of one minute, the shutter remaining open for 10 seconds after each signal, and when the series is completed the shutter will be opened and closed rapidly several times.

Comparisons with chronometers can be obtained direct by applying at the Hydrographic office.

Tides.—*Cancel* paragraph, and *substitute*:—

Tides.—It is high water, full and change, at Pola, at IXh. 5m.; springs rise 1¼ feet, neaps 9 inches.

Pages 121, 122.—LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS. — Cape Compare breakwater. — A *green occulting* light *every five seconds* (eclipse, *two seconds*) is exhibited, at 33 feet above high water, from a column, 19 feet high, on a cylindrical hut at the site of the head of the breakwater under construction, 7 cables, N. 5° W., from Cape Compare, and should be seen from a distance of 5 miles. The light is unwatched.

San Andrea island.—A *red fixed* light is exhibited at 17 feet above high water, from a black hut, 17 feet high, on the south point of S. Andrea island, and should be seen from a distance of 5 miles. The light is unwatched.

Leading lights.—Front.—Two *green fixed* lights, placed vertically, are exhibited from the north-west extreme of S. Pietro peninsula, and should be seen from a distance of 3 miles. The lights are unwatched.

Rear.—A *red flashing* light *every five seconds* (flash, *two seconds*) is exhibited from the buildings of the Naval Land and Marine Works Office, situated 3½ cables, S. 39° E., from the preceding light. The light is unwatched.

These lights in line lead through the outer harbour.

[illegible] section, and [illegible]

Time signal.—[illegible]

Time signals.—A [illegible] square, on the roof of the Imperial Hydrographic Office, is closed daily [illegible] minutes before noon Greenwich mean time, and opened by [illegible] such a manner that the sky can be seen through the frame of the [illegible] operates, at noon, or 12h. 0m. 0s. Greenwich mean time.

A gun at the Harbour castle is fired on the closing of the shutter at noon standard mean time.

Should either or both the signals be inoperative, the shutter will be closed one minute after the signal, and repeatedly opened and closed for the space of one minute.

When required by vessels or the Imperial British Navy, the shutter is closed at 10h. 45m. and opened at 11h. 0m. 0s. standard mean time, or 22h. 0m. 0s. Greenwich mean time. Ten or more strokes will follow the first at intervals of one minute, the shutter remaining open for 10 seconds after each signal, and when the strokes have ceased the shutter will be opened and closed rapidly several times.

Chronometers with chronometers can be obtained direct by application at the Hydrographic office.

Tides.—[illegible]

Tides.—It is high water, full and change, at Tola, at 11h. 0m. (springs rise 11 feet, neaps 3 feet).

[illegible] 121. 122.—LIGHTS.—[illegible]

LIGHTS.—Cape Compare breakwater.—A [illegible] revolving light every five seconds (eclipse, [illegible] is exhibited at 37 feet above high water, from a column, 10 feet high, on the [illegible] head but at the site of the breakwater under construction. Position, Latitude, N. 37° W., from Cape Compare, and should be seen from a distance of 5 miles. The light is unwatched.

San Andres Island.—A red fixed light is exhibited at 17 feet above high water, from a black hut, 17 feet high, on the south point of S. Andres island, and should be seen from a distance of 5 miles. The light is unwatched.

Leading lights.—Front.—Two green fixed lights, placed vertically, are exhibited from the northwest entrance of S. Pedro peninsula, and should be seen from a distance of 3 miles. The lights are unwatched.

Rear.—A red fixed light every five seconds (flash, two seconds) is exhibited from the buildings of the Naval Land and Marine Works Office, situated 1½ miles, S. 35° E., from the preceding light. The light is unwatched.

These lights in line lead through the outer harbour.

Pages 121, 122 continued. Plan 202.

Harbour lights.—Two *white fixed* lights, placed vertically, are exhibited at 28 and 34 feet above high water, from a pole, 27 feet in height above the ground, at the head of S. Pietro bay, in the north-eastern extreme of the port, and should be seen from a distance of 2 miles.

Two *red fixed* lights, placed vertically, are exhibited, at 24 and 18 feet above high water, from a lamp-post, 23 feet high, on the head of Kaiserin Elisabeth mole, and should be seen from a distance of 4 miles. These lights show *white* towards the inner end of the mole.

Two *green fixed* lights, placed horizontally, 5 feet apart, are exhibited, at 105 feet above high water, from the roof of a house 45 yards northward of the amphitheatre, and should be seen from a distance of 2 miles.

A *red fixed* light is exhibited, at 21 feet above high water, from an iron lamp-post, 17 feet high, on the head of S. Tomaso mole, near the infantry barracks, and should be seen from a distance of 3 miles.

A *green fixed* light is exhibited, at 25 feet above high water, from a lamp-post on a black and white base, 23 feet high, on Franz Joseph quay, and should be seen from a distance of 2 miles. The light shows *white* towards the land.

A *green fixed* light is exhibited, at 26 feet above high water, from a black and white structure, eastward of Olivi island bridge, and should be seen from a distance of 2 miles.

The harbour lights are unwatched.

Light-buoy.—A white conical light-buoy, exhibiting a *white occulting* light *every ten seconds* (eclipse, *two seconds*) is moored about three-quarters of a mile northward of Cape Compare, and nearly a cable north-westward of the light-beacon on the site of the head of the breakwater, extending northward from that cape. Vessels must pass northward of the buoy.

Page 123.—Regulations.—Particular attention is necessary to the signal carried by dredgers, when entering or leaving this port. *See* page 9.

Boom-defence practice.—Floating booms are frequently placed for practice in the naval port of Pola, and a guardship, moored near them, will warn approaching vessels, either by hailing or by sound signals, not to proceed further.

Docks.—*See* Appendix.

Chart 201, Gulfs of Venice and Trieste.

Page 124.—Measured mile beacons.—*Cancel* first paragraph, and *substitute*:—

Measured distance.—Beacons are erected on the coast between Capes Compare and Promontore for marking a measured distance of 4 miles. The north-western beacons are near Cape Bran-

Pages 121, 122 continued. Pilot 304.

Harbour lights.—Two white fixed lights, placed vertically, are exhibited at 28 and 36 feet above high water, from a pole, 37 feet in height above the ground, at the head of St. Pierre bay, in the north-eastern extreme of the port, and should be seen from a distance of 2 miles.

Two red fixed lights, placed vertically, are exhibited, at 24 and 14 feet above high water, from a lamppost, 23 feet high, on the head of Saint Elizabeth mole, and should be seen from a distance of 2 miles. These lights show white towards the inner end of the mole.

Two green fixed lights, placed horizontally, 5 feet apart, are exhibited, at 105 feet above high water, from the roof of a house of yellow sandstone of the cathedralcare, and should be seen from a distance of 2 miles.

A red fixed light is exhibited, at 21 feet above high water, from an iron lamppost, 17 feet high, on the head of St. Pierre mole, near the infantry barracks, and should be seen from a distance of 2 miles.

A green fixed light is exhibited, at 25 feet above high water, from a lamppost on a black and white base, 20 feet high, on Fort Desaix, and should be seen from a distance of 2 miles. The light shows white towards the land.

A green fixed light is exhibited, at 20 feet above high water, from a black and white structure, surmount of Fort Saint Louis, and should be seen from a distance of 2 miles.

The harbour lights are unwatched.

Light-buoy.—A white conical light-buoy, exhibiting a white revolving light every ten seconds (eclipse, ten seconds) is moored about three-quarters of a mile northwest of Cape Carbet, and nearly a cable northwestward of the light-beacon on the site of the head of the freshwater, extending northward from that cape. Vessels must pass northward of the buoy.

Page 123.—Regulations.—Particular attention is necessary to the signal carried by dredgers, when entering or leaving this port. See page 8.

Boom-defence practice.—Floating booms are frequently placed for practice in the naval port of Fort, and a practicable, moored near them, will warn approaching vessels, either by hailing or by sound signals, not to proceed further.

Docks.—See Appendix.

Pages 124, 125, 126 of Pilot and Tides.

Page 124.—Measured mile beacons.—Amend first paragraph, and substitute:—

Measured distance.—Beacons are erected on the coast between Cape Carbet and Fromontre for marking a measured distance of 3 miles. The north western beacon are near Cape

Page 124 continued. Chart 201.

corso, and the south-eastern beacons are on the south-eastern slope of Mount Cope; the beacons in line bear N. 35° E. Other beacons divide the distance into one mile sections, the second section from the south-eastward being further divided into half-miles.

Add to last paragraph of section:—

Vessels running trials on the measured distance and flying International code pendant A, finding for any reasons, such as much smoke, that the signal is not likely to be seen by any vessels near the course, give short blasts with the siren or steam whistle, or short flashes with a searchlight, until satisfied that the signal is understood.

Plan, Port Veruda, on 202.

LIGHT.—*Cancel,* and *substitute*:—

LIGHT.—A *red fixed* light is exhibited, at 33 feet above high water, from an iron support, adjoining a white house, 22 feet high, 44 yards within Verudella point, and should be seen from a distance of 6 miles. For the arc of visibility, *see* Light list and chart.

Chart 201, Gulfs of Venice and Trieste.

Page 125.—LIGHTS.—*Cancel* first paragraph, and *substitute*:

LIGHTS.—A *white group occulting* light, showing *two* eclipses *every twenty seconds,* thus:—light, *ten seconds;* eclipse, *three seconds;* light, *four seconds;* eclipse, *three seconds,* is exhibited, at 115 feet above high water, from a white stone circular tower with a green lantern, over a dwelling 102 feet high, on Porer rock, and should be seen from a distance of 16 miles. For the arc of visibility, *see* Light list and chart. View on chart 201.

The light exhibited from the semaphore platform is temporarily discontinued.

Fog signal.—*Cancel* paragraph, and *substitute*:—

Fog signal.—A steam fog horn gives *four* blasts *every minute,* thus:—*two* blasts occupying *five seconds;* interval, *five seconds; two* blasts occupying *five seconds;* interval, *forty-five seconds.*

Semaphore.—*Cancel,* and *substitute*:—

Telegraph and signal station.—There is a telegraph and signal station on Porer rock, and communication can be made by the International code of signals. The station has telephonic communication with Pola, Fasana, and Brioni.

During gun practice near Cape Promontore, the International code signal G.O. (you are in the line of fire, or within range of forts) will be hoisted at Porer rock signal station.

Beacons.—*Cancel* paragraph and footnote, and *substitute*:—

Beacons.—Two posts, surmounted by white discs, stand on rocks situated N.E. by E. ½ E., distant 4½ cables, and E. ¼ N., distant

Page 44, continued. Insert A.

were, and the south-eastern beacons are on the south-eastern slope of Mount Cope; the beacons in line bear N. 88° E. either beacon divide the distance into one mile sections, the second station from the south-eastward being further divided into half miles.

Add to last paragraph of section:—

Vessels running trials on the measured distance and flying International code pendant A, finding for any reason, such as much sunshine, that the signal is not likely to be seen by any vessels near the course, give short blasts with the siren or steam whistle, or short flashes with a searchlight, until satisfied that the signal is understood.

Page, Part I, under, on 24.

LIGHT.—Second, and substitute:—

LIGHT.—A red fixed light is exhibited, at 24 feet above high water, from an iron support, adjoining a white house, 22 feet high, 44 yards within Vernalla point, and should be seen from a distance of 6 miles. For the arc of visibility, see Light list and chart.

Insert 201, Gulfs of Finlay and Fraser.

Page 125.—**LIGHTS.**—Second last paragraph, and substitute:—

LIGHTS.—A white occulting revolving light, showing two eclipses every twenty seconds, three eclipses, two occulting eclipses, 4 revolutions, light, two seconds eclipse, five seconds is exhibited, at 112 feet above high water, from a white stone circular tower with a green lantern, over a dwelling 100 feet high, on Porter rock, and should be seen from a distance of 12 miles. For the arc of visibility, see Light list and chart. View on chart 1603.

The light exhibited from the semaphore platform is temporarily discontinued.

Fog signal.—Second paragraph, and substitute:—

Fog signal.—A steam fog horn gives two blasts every one minute—two blasts occupying the seconds interval, one second, the last occupying five seconds interval, forty-five seconds.

Semaphore.—Second, and substitute:—

Telegraph and signal station.—There is a telegraph and signal station on Porter rock, and communication can be made by the International code of signals. The station has telephonic communication with Pelu, Fraser, and Brown.

During gun practice near Cape Pemberton, the International code signal G.C. (see are in the line of fire, or within range of fire) will be hoisted at Porter rock signal station.

Beacons.—Second paragraph and footnote, and substitute:—

Beacons.—Two posts, surmounted by white discs, stand [illegible] situated N.E. by E. ½ E., distant 4½ cables, and E.

Page 125 continued. Chart 201.

4½ cables from Porer rock lighthouse. Their existence must not be depended on, as they are liable to be washed away by the sea.

Page 126.—Sunk rock.—Buoys.—*Cancel* section, and *substitute*:—

LIGHT.—A *white group flashing* light, with a *red* sector, showing a group of *two* flashes *every six seconds*, is exhibited, at 48 feet above high water, from a truncated conical tower, 61 feet high, on the shoalest part of Sunk rock; the *white* light should be seen from a distance of 12 miles, and the *red* light of 8 miles. For the sector, *see* Light list and chart. The light is unwatched.

Buoy.—A red conical buoy is moored on the northern side of Sunk rock shoal in 7 fathoms.

Chart 2711, Gulf of Quarnero.

Page 127.—LIGHT.—The light on Merlera point should be seen from a distance of 6 miles.

CHAPTER V.

Chart 2711, Gulf of Quarnero.

Page 129.—There is a telegraph office, with a restricted day service, at Carnizza, which has also telephone lines locally and to Altura.

Plan, Port Rabaz, on chart 2711.

Page 130.—Port Rabaz.—LIGHT.—The light on S. Andrea point should be seen from a distance of 5 miles.

A *green fixed* light is exhibited, at 16 feet above high water, from a lamp-post, 15 feet high, on the quay, and should be seen from a distance of 2 miles; it is unwatched.

Chart 2711, Gulf of Quarnero.

Page 131.—Fianona bay.—Light.—A *green fixed* light is exhibited, at 16 feet above high water, from a lamp-post, 16 feet high, on Fianona quay, and should be seen from a distance of 2 miles. The light is not visible from Farasina channel. It is unwatched, and is unreliable in north-easterly gales.

LIGHTS.—Ika.—*Cancel* first paragraph, and *substitute*:—

LIGHTS.—Ika.—A *red fixed* light is exhibited, at 42 feet above high water, from a green lamp-post, 17 feet high, on the north shore of Port Ika, nearly 12 miles northward of Fianona bay, and should be seen from a distance of 4 miles. It is unwatched, and is unreliable during north-easterly gales.

The light exhibited from Lovrana pier should be seen from a distance of 2 miles; it is unwatched.

(page 120 continued. Part 3rd.)

of cables from Port Rock lighthouse. These cables are not to be depended on, as they are false to be washed away by the sea.

Page 125.—SUNK ROCK.—BUOYS.—[illegible]

LIGHT.—A white pump shaped light, with a red water-shooter, stands a group of two flashes every minute, is exhibited, at 48 feet above high water, from a truncated conical tower, 61 feet high, on the detached part of dark rock; the white light should be seen from a distance of 12 miles, and the red light at 7 miles. For the sectors see Light list and chart. The light is unattended.

BUOY.—A red conical buoy is moored on the eastern side of Sunk Rock, and about in 7 fathoms.

(Part 3rd, page 126 continued.)

Page 127.—LIGHT.—The light on Mewstone should be seen [illegible] distance of 9 miles.

CHAPTER V.

(Part 3rd, page 128 continued.)

Page 128.—There is a telegraph office, with a [illegible] at Cremyll, which has also telephone [illegible] to Plymouth.

(Part 3rd, page 129 continued.)

Page 130.—Port Rakes.—LIGHT.—The light on [illegible] should be seen from a distance of 8 miles.

A green fixed light is established, at 11 feet above high water, from a lamp-post, 15 feet high, on the quay, and should be seen from a distance of 7 miles; it is unattended.

(Part 3rd, page 130 continued.)

Page 131.—Fisherman's Bay.—Light.—A green fixed light is established, at 16 feet above high water, from a lamp-post, 16 feet high, on Fisherman's quay, and should be seen at a distance of 2 miles. The light is not visible from Fareham channel. It is unattended, and is unreliable in north-easterly gales.

LIGHTS.—Ike.—[illegible]

LIGHTS.—Ike.—A red and white light is established, at 42 feet above high water, from a lamp-post, 17 feet high, on the north shore of Port Ike, nearly 12 miles northward of Fisherman's bay, and should be seen from a distance of 4 miles. It is unattended, and is not reliable during north-easterly gales.

The light established from Fareham, [illegible] should be seen from a distance of 3 miles; it is unattended.

Page 131 continued. Chart 2711.

Abbazia.—*Cancel* the two first paragraphs of section, and *substitute*:—

Abbazia.—There is a conspicuous high chimney, with its upper part black and its lower part white, about three-quarters of a mile southward of Abbazia.

Light.—A *red occulting* electric light *every three seconds* is exhibited, at 25 feet above high water, from a white iron column with a red lantern, over a cylindrical house, 22 feet high, on Abbazia molehead, and should be seen from a distance of 8 miles. The light is unwatched. For the arc of visibility, *see* Light list.

Should electricity fail a *red fixed* light will be exhibited, and should be seen from a distance of 6 miles.

Mooring buoy.—A mooring buoy for large vessels is situated eastward of the molehead.

Volosca.—*Cancel* section, and *substitute*:—

Volosca.—Light.—A *red fixed* light is exhibited, at 18 feet above high water, from a green lamp-post, 15 feet high, on Volosca molehead, and should be seen from a distance of 3 miles; it is unwatched.

Plan 1996, Fiume.

Page 132.—FIUME.—Population.—The population of Fiume was 49,806 in 1910.

Trade.—Shipping.—In 1912, the value of the imports was £9,007,000, and that of the exports £10,875,000.

In the same year the port was entered by 14,753 steam vessels, of 3,105,000 tons, and 1,746 sailing vessels, of 80,000 tons.

Dock.—*See* Appendix.

The PORT of Fiume.—*Cancel* "(including works in progress)."

Page 133.—Moles.—Petroleum basin.—*Cancel* paragraph, and *substitute*:—

Moles.—Within the port, six moles extend south-westward from the northern shore. The channel between the western of these moles and Maria Teresa mole is about 1½ cables wide.

Mooring buoys.—*Cancel* paragraph, and *substitute*:—

Mooring buoys.—There are several mooring buoys in the port.

Petroleum basin.—The Petroleum basin is situated about 4½ cables north-north-westward of the outer end of Maria Teresa mole.

The torpedo works are situated from about 3 to 4½ cables westward of the Petroleum basin.

From Admiralty chart 2771.

Abbasia.—One of the two dangerous groups of wrecks, and sub-
[illegible]—

Abbasia.—There is a rock-bound high shoreline with its upper
part black and its lower part white, at a distance of a mile
southward of Abbasia.

Light.—A red revolving electric light, every three second [illegible]
[illegible], at 25 feet above high water, from a white iron column with a
red lantern, over a white hotel [illegible]. 22 feet high, on Abbasia main-
land, and should be seen from a distance of 7 miles. The light is
[illegible]. For the arc of visibility, see [illegible].
Should electricity fail a red [illegible] will be exhibited, and should
be seen from a distance of 6 miles.

Morning buoy.—A [illegible] large vessel is moored
southward of the [illegible].

Velosca.—[illegible] and [illegible]—

Velosca.—Light.—A red [illegible] light is exhibited, at 5[illegible] feet
above high water, from a green [illegible] 15 feet high on Velosca
[illegible], and should be seen [illegible] of a mile in [illegible]
[illegible].

From 1909, Admiralty.

Page 102.—FIVEMILE.—Population.—[illegible]
Fivemile was 49,[illegible] in 1911.

Trade.—Shipping.—In [illegible] the value of the imports was
[illegible], and that of the exports [illegible].
In the same year the port was entered by 11,[illegible] steam vessels of
[illegible] tons and 1,[illegible] sailing vessels of [illegible] tons.

Dock.—See Appendix.

The PORT of Fivemile [illegible] is in progress."

Page 103.—Moles.—Petroleum basin.—[illegible] paragraph,
[illegible]—

Moles.—Within the port, six moles extend southwestward from
the northern shore. The channel between the western of these moles
and Mars Terras mole is about [illegible] wide.

Mooring buoys.—[illegible] paragraph, and substitute—

Mooring buoys.—There are several mooring buoys in the port.

Petroleum basin.—The Petroleum basin is situated about
[illegible] southwestward of the pier and of Mars Terras mole.
The tugboats are moored [illegible] of the [illegible]
of the Petroleum basin.

Page 133 continued. Plan 1996.

Bergudi harbour.—*Cancel* "there is a mooring buoy off the entrance," and paragraph commencing "Two practice targets."

Gabriel Baross harbour.—*Cancel* the second paragraph.

LIGHTS.—The *fixed* and *flashing* electric light near the west end of the town should be seen from a distance of 16 miles.

Maria Teresa mole.—*Cancel* paragraph, and *substitute*:—

Maria Teresa mole.—Two *red fixed* lights, placed vertically, at 23 and 26 feet above high water, are exhibited from a pole on a hut, 26 feet high, on the outer end of Maria Teresa mole, and should be seen from a distance of 3 miles; the lights are unwatched.

Light-vessel.—*Cancel* paragraph.

Bergudi harbour.—*Cancel* paragraph.

Page 134.—*Cancel* second paragraph, and *substitute*:—

A *green fixed* light is exhibited from the outer end of the new mole, 2 cables westward of Marie Valerie mole, and should be seen from a distance of one mile; the light is unwatched.

Rudolf, Zichy, and Adamich moles, and Gabriel Baross.—*Cancel* paragraphs, and *substitute*:—

Rudolf mole.—A *fixed* light, showing *white* and *green* sectors, is exhibited, at 35 feet above high water, from a lamp-post, 28 feet high, on the western outer end of Rudolf mole.

For the sectors of the light, *see* Light list.

A *white fixed* light is exhibited, at 35 feet above high water, from a lamp-post, 28 feet high, on the south-eastern extreme of Rudolf mole.

Zichy mole.—A *fixed* light, showing *white* and *green* sectors, is exhibited from each corner of the outer end of Zichy mole. For the sectors, *see* Light list.

Adamich mole.—A *fixed* light, showing *green* seaward and *white* towards the land, is exhibited from the outer end of Adamich mole.

Rudolf, Zichy, and Adamich mole lights are electric, and should be seen from the distance of one mile.

Gabriel Baross.—A *red flashing* light *every three seconds* (flash, *three-tenths of a second*) is exhibited, at 52 feet above high water, from a grey iron pillar, surmounted by a red ball under the lantern, over a round house, 53 feet high, on the west end of the outer mole, and should be seen from a distance of 5 miles.

Light-buoy.—A light-buoy, exhibiting a *white fixed* light, is moored about a cable eastward of the new mole, on the north side of the entrance to the port. It is unreliable in bad weather.

Page 134 continued. Plan 1996.

Regulations.—Vessels entering or leaving Fiume or Gabriel Baross harbour must proceed at a slow speed, and keep on the starboard side of the fairway; those entering Gabriel Baross harbour wait outside till those leaving are clear.

Torpedoes.—Regulations.—Torpedo target rafts are moored on lines drawn N. 86° W. and S. 54° W. from the torpedo works. Those on the first bearing are moored at distances of 1,640, 2,188, 3,282, and 4,376 yards, and each is marked at night by a *white fixed* light, and at distances of 5,470 and 6,564 yards, each marked by two *white fixed* lights. Those on the second bearing are moored at distances of 3,282, 6,564, and 7,658 yards, and each is marked by two *white fixed* lights. In order to prevent collision between vessels navigating between Fiume and Volosca and Abbazia, and torpedoes fired from the torpedo works, vessels must pass about a cable off Villa Petri, which is situated on the coast with Castua church bearing N. 11° W. Vessels from Abbazia towards Veglia island must steer southward along the Istrian coast until past the electric central chimney, a distance of about 9 cables.

The firing of each torpedo is indicated by a *long* blast with a whistle or siren at the firing station. Should a torpedo deviate from its intended direction, *short* blasts will be sounded continuously with a more powerful whistle or siren until the torpedo stops.

Tides.—*Cancel* paragraph, and *substitute*:—

Tides.—It is high water, full and change, at Fiume, at VIIIh. 28m.; springs rise 9 inches, neaps 6 inches.

Plan, Buccari bay, on chart 2711.

Page 135.—Signal station.—There is a signal station on Ostro point.

Mooring buoy.—A mooring buoy has been placed 2 cables south-eastward of Buccari harbour light lamp-post.

Chart 2711, Gulf of Quarnero.

Page 136.—Bagna cove.—Tunny fishery.—Large tunny nets will extend about 6 cables seaward from the shore of Bagna cove, which is situated on the north-west coast of the northern part of Cherso island, from June until October, inclusive. Other nets will extend both ways at right angles to those extending seaward, so that the whole will form a T. Two light-buoys will mark the north and south extremes of the outer nets, and the vessel *Vedetta* will be moored about the middle of the outer nets.

Fishing is prohibited, except to the licensees, on the coast from Jablanac point south-westward to Sterganac point, during the fishery.

Farasina.—A mooring buoy has been placed in Farasina cove.

[illegible]

Equitations.—[illegible]

Torpedoes.—Regulations.—[illegible]

[illegible]

Tides.—[illegible]

Tides.—[illegible]

[illegible]

Page 183.—Signal station.—[illegible]

Mooring buoy.—[illegible]

[illegible]

Page 120.—Hurra cove.—Turning. [illegible]

[illegible]

Fishing is prohibited except in the harbours [illegible]

Harbour.—[illegible]

Plan, Port Cherso, on sheet 1561.

Page 137.—LIGHTS.—At Molino point.—*Cancel* paragraph, and *substitute*:—

Molino point.—A *red fixed* light is exhibited, at 18 feet above high water, from a red lamp-post, 16 feet high, on Molino point, and should be seen from a distance of 3 miles. The light shows *white* towards the land, and is unwatched.

On New molehead.—*Cancel* paragraph, and *substitute*:—

New molehead.—A *green fixed* light is exhibited, at 19 feet above high water, from a lamp-post, 16 feet high, on the new molehead at Cherso, and should be seen from a distance of 2 miles. The light shows *white* towards the land, and is unwatched.

Chart 2711, Gulf of Quarnero.

Levrera island.—LIGHT.—A *white group flashing* light, showing a group of *three* flashes *every nine seconds*, thus:—*three* flashes of *three-tenths of a second* each; eclipse between flashes, *one and two-tenths seconds;* eclipse between groups, *five and seven-tenths seconds*, is exhibited, at 37 feet above high water, from a red conical turret with gallery, 25 feet high, on the west coast of Levrera island about 4 cables from its southern end, and should be seen from a distance of 11 miles. The light is unwatched.

Plan, Porto Lussin Piccolo, on sheet 1561.

Page 139.—*Cancel* second paragraph, and *substitute*:—

There are two mooring buoys on the eastern side of the harbour near the town, and three north-westward of the Health office, inside which are eight mooring buoys for torpedo boats.

The town.—*Cancel* "The tender *Lissa*, stationed here, is available for salvage purposes."

LIGHTS.—At Sta. Croce point.—*Cancel* paragraph, and *substitute*:—

Sta. Croce point.—A *green occulting* light is exhibited, at 31 feet above high water, from a red iron post, 28 feet high, on Sta. Croce point, the north extreme of Koludarc island, and should be seen from a distance of 3 miles. The light is unwatched.

Poljana point.—This light is visible 7 miles.

Tides.—*Cancel* paragraph.

Page 140.—Port Cigale.—Light.—A *red fixed* light is exhibited, at 18 feet above high water, from an iron standard, 15 feet high, from the head of a new mole on the northern side of Port Cigale, and should be seen from a distance of one mile. The light is unwatched, and it is not exhibited during north-westerly gales.

Chart 2711, Gulf of Quarnero.

Page 141.—CANIDOLE ISLANDS.—Silo rock.—Light.—A *white flashing* light *every three seconds* is exhibited at 36 feet above high water, from a hexagonal stone tower, 33 feet high, on

[illegible] Island.

Page 137.—LIGHTS.—At Molino point.—[illegible] graph, and add dates:—

Molino point.—A red fixed light is exhibited at [illegible] high water, from a red lamppost, 12 feet [illegible] visible for [illegible] from a distance of 9 miles. The light [illegible] towards the land, and is unwatched.

On New molehead.—[illegible]

New molehead.—A [illegible] above high water, from a lamppost, [illegible] at Liverpool, and should be seen from a [illegible] above [illegible] the land.

[illegible] Quay or Gladstone.

Bootle island.—LIGHT.—A [illegible] a group of three flashes [illegible] visible at a distance of 9 miles, [illegible] and [illegible] is exhibited, at 37 feet above high water, from a [illegible] 22 feet high, on the [illegible] about 1 cable from the southern end, and should be seen from [illegible] 11 miles. The light is unwatched.

[illegible] Alexandra dock, on stage [illegible]

Page 138.—[illegible] sound [illegible]

There are two pending lamps on [illegible] the [illegible] the [illegible] and it is [illegible] the Bootle [illegible] which are [illegible] pending lamps for [illegible]

The town.—[illegible] "The [illegible] sound [illegible] able for [illegible] purposes."

LIGHTS.—At Sta. Croce point.—[illegible] as follows:—

Sta. Croce point.—A [illegible] light is exhibited at 21 feet above high water, from [illegible] 28 feet high, on Sta. Croce point, the north extreme of Sabinar island, and should be seen from a distance of 8 miles. The light is unwatched.

Poliana point.—The light is [illegible]

Tides.—[illegible] paragraph.

Page 140.—**Port Cigale.—Light.**—A red fixed light is exhibited, at 18 feet above high water, from an iron standard, 12 feet high, from the head of a new mole on the northern side of Port Cigale, and should be seen from a distance of [illegible] miles. The light is unwatched, and is not exhibited during [illegible] weather.

[illegible] only of [illegible]

Page 141.—**CANIDOLE ISLANDS.—Sile rock.—Light.**—A white flashing light every [illegible] is exhibited at [illegible] feet above high water, from a [illegible] tower, [illegible]

Page 141 continued. Chart 2711.

Silo rock, and should be seen from a distance of 9 miles. The light is unwatched.

Light proposed.—*Cancel* paragraph.

GALIOLA ISLE.—LIGHT.—The *white* flashes should be seen from a distance of 14 miles, and the *red* flashes of 11 miles.

Page 142.—SANSEGO ISLAND.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white fixed* and *flashing* light *every six seconds* (flash *four seconds*) is exhibited, at 357 feet above high water, from a square turret above a square dwelling, 40 feet high, on Mount Garbe, the highest point of Sansego island, and should be seen from a distance of 20 miles. The light is obscured towards Netak point, and in places by Lussin island. *See* Light list and chart.

The lighthouse is connected by telephone.

Dragazoul cove.—Harbour light.—The light should be seen from a distance of 2 miles.

Mooring buoy.—There is a mooring buoy in Dragazoul cove in 3 fathoms water.

Plan, Port S. Pietro di Nembo, on sheet 1561.

Page 143.—The light near the Health office, S. Pietro di Nembo island, is unwatched, and is visible 3 miles.

Chart 2711, Gulf of Quarnero.

Page 144.—*Cancel* first paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light, showing thus: —*white* fixed, *fifty-two seconds; red* flash, *eight seconds*, is exhibited, at 56 feet above high water, from an octagonal tower, 42 feet high, with a white dwelling adjoining, on Gruica islet, and should be seen from a distance of 13 miles.

Neresine.—Light.—The light exhibited from Neresine mole-head is *green fixed*, and should be seen from a distance of 2 miles.

Mooring buoy.—A mooring buoy has been placed off Neresine harbour in 4½ fathoms water.

S. Martino harbour.—Mooring buoy.—A mooring buoy has been placed in S. Martino harbour in 14 fathoms water.

Darche cove.—Anchorage is prohibited for 80 yards off the north-west shore of Darche cove.

Page 145.—*Cancel* first paragraph, and *substitute*:—

Lussin Grande.—Light.—A *red fixed* light is exhibited, at 34 feet above high water, from a green lamp-post, 18 feet high, situated 18 yards within Cappellata point, Lussin Grande, and should be seen from a distance of 3 miles. The light is unwatched.

Mooring buoy.—A mooring buoy is placed off Lussin Grande harbour in 2½ fathoms water.

Page 145 continued. Chart 2711.

Port S. Andrea.—Light.—A *red fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 15 feet high, on the molehead, and should be seen from a distance of 3 miles. The light is unwatched, and is unreliable in heavy weather.

Kraljetto rock.—Beacon.—An iron post, surmounted by a red mark, stands on Kraljetto rock.

Terstenik island.—*For* "Long. 14° 45′ E." in margin *read* "14° 35′ E."

LIGHT.—*Cancel* first paragraph, and *substitute*:—

A *white fixed* light, with a *red* sector, is exhibited at 87 feet above high water, from a stone octagonal tower, 58 feet high, with dwelling adjoining, on the middle of Terstenik island; the *white* light should be seen from a distance of 15 miles, and the *red* light of 10 miles. For the sectors of the light, *see* Light list and chart.

Caisole cove.—Light.—A *red fixed* light is exhibited, at 21 feet above high water, from a green lamp-post, 18 feet high, 15 feet within Caisole molehead, and should be seen from a distance of 4 miles. The light is unwatched, and cannot be lighted during south-easterly gales.

Page 146.—Gallon islet lies about three-quarters of a mile off Cernika point on the south-west coast of Veglia island.

Light.—A *red flashing* light *every three seconds* is exhibited, at 33 feet above high water, from a red conical turret, 31 feet high, on the north-east extreme of Gallon islet, and should be seen from a distance of 5 miles. The light is unwatched.

Plan, Port Veglia, on sheet 1561.

Port Veglia.—Harbour works are in progress.

LIGHTS.—A *green fixed* light is exhibited, at 15 feet above high water, from a green lamp-post, 15 feet high, on the north mole of Port Veglia, and should be seen from a distance of 2 miles. The light is unwatched.

Chart 2711, Gulf of Quarnero.

Negritto point light should be seen from a distance of 5 miles.

Page 147.—Cassion bay.—Harbour works and blasting operations close the entrance to Ponte harbour, except for small vessels by day when there is no blasting going on. A red flag is hoisted on a scaffold in the entrance one hour before firing the mines. Vessels should anchor southward of the vertical *green* lights on the eastern side of the entrance to the bay (December, 1912).

Mooring buoy.—A mooring buoy is placed outside the entrance to Cassion bay.

LIGHT.—Morganillo point.—*Cancel* paragraph, and *substitute*:—

LIGHT.—Morganillo point.—A *white group flashing* light,

Port S. Andrea.—Light.—A [illegible] is exhibited at [illegible] feet above high water, from a lamp-post, 15 feet high, on the [illegible] head, and should be seen from a distance of [illegible] miles. The light is unwatched and is available in every weather.

Kralijeto rock.—Beacon.—An iron [illegible], surmounted [illegible] and mark, stands on Kralijeto rock.

Torstenik island.—[illegible]

LIGHT.—[illegible]

A white [illegible] light, with a red sector, is exhibited at [illegible] feet above high water, from a stone octagonal tower, [illegible] with [illegible] adjoining, on the middle of Torstenik island. The white light should be seen from a distance of 13 miles, and the red light or [illegible] miles. The sectors of the light, or light-line and [illegible].

Cabole cove.—Light.—A [illegible] light is exhibited at [illegible] feet above high water, from a green lamp-post, 15 feet high, [illegible] within Cabole anchorage, and should be seen from a distance of [illegible] miles. The light is unwatched, and cannot be depended [illegible] weather.

Pass 146.—Galion islet. [illegible]

Danilla point on the southern coast of Vigilla island.

Light.—A red [illegible] light [illegible] is exhibited at [illegible] feet above high water, from a [illegible] at [illegible] feet [illegible] the north east extreme of Galion islet, and should be seen from a distance of 3 miles. The light is unwatched.

[illegible]

Port Vegilia.—Harbour [illegible]

LIGHTS.—A [illegible] light is exhibited [illegible] feet above high water, from a green lamp-post, 15 feet high, on the [illegible] Port Vegilia, and should be seen from a distance of [illegible] miles. The light is unwatched.

[illegible]

Negritto point light should be seen from a distance of [illegible]

Pass 147.—Ossion bay.—Harbour [illegible] and [illegible] close the entrance to Porto harbour, except for small vessels by day when there is no blowing [illegible] A red flag is hoisted [illegible] in the entrance one hour before [illegible] should under sunshine of the vertical [illegible] on the [illegible] of the entrance to the bay (Admiralty, 1882).

Mooring buoy.—A mooring buoy is placed [illegible] to Vegilia bay.

LIGHT.—**Morrenillo point.**—[illegible]

LIGHT.—**Morrenillo point.**—A [illegible]

Page 147 continued. Chart 2711.

showing a group of *three* flashes *every seven seconds*, is exhibited, at 39 feet above high water, from a conical white iron turret, 33 feet high, and should be seen from a distance of 9 miles; it is unwatched.

Page 148.—Malinska.—The sandbank on the south-western side of the entrance to Port Malinska is marked by an iron post, painted black and white, and surmounted by two discs.

Light.—Malinska molehead light should be seen from a distance of 3 miles.

Castelmuschio bay.—Two mooring buoys are placed in the inner part of the bay, about 65 yards off-shore.

Page 149.—Stipana bay.—Light.—A *red fixed* light is exhibited, at 19 feet above high water, from a green lamp-post, 15 feet high, on Port Sillo molehead, and should be seen from a distance of 3 miles. The light is unwatched, and is unreliable during north-easterly gales.

Page 150.—*Cancel* fourth paragraph, which commences "A (provisional) *fixed white* light."

Mooring buoy.—A mooring buoy is placed in about 14 fathoms water off Crkvenica harbour.

Bescanuova molehead light is visible 2 miles.

Plan, Port Arbe, on sheet 1561.

Page 153.—Shoals.—Beacon.—The iron beacon on the edge of the shoal off S. Antonio point has been removed. *Cancel* paragraph.

Chart 2711, Gulf of Quarnero.

Page 155.—LIGHT.—Cape Fronte light should be seen from a distance of 4 miles.

S. Cristoforo cove.—Light.—A *white fixed* light is exhibited, at 21 feet above high water, from an iron lamp-post, 18 feet high, on the north-western side of the entrance to S. Cristoforo cove, and should be seen from a distance of 5 miles. The light is unwatched.

LIGHT.—Dolfin islet.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white group flashing* light, with a *red* sector, showing a group of *two* flashes *every six seconds*, is exhibited, at 106 feet above high water, from a white iron turret, 34 feet high, on the summit of Dolfin islet; the white light should be seen from a distance of 12 miles, and the red of 8 miles. The light is unwatched. For the arc of the *red* sector, which shows over Laganj island and the shoals north-westward of it, *see* Light list and chart.

Page 156.—Kamenjak islet.—LIGHT.—A *white flashing* light *every three seconds*, is exhibited, at 39 feet above high water, from a small red iron tower, 28 feet high, on the northern end of Kamenjak islet, and should be seen from a distance of 8 miles. The

Page 134.—Mallaig.—[illegible]

showing a ship or [illegible] [illegible] is established [illegible] 70 feet above high water, from a conical white iron tower, 30 feet high, and should be seen on a clear night at a distance of 9 miles. It is numbered.

Page 135.—Malinsna.—The small [illegible] in the [illegible] of the entrance to Loch Malinsna is marked by an iron post, painted black and white, and numbered by two dots.

Light.—Malinsna [illegible] light should be seen from [illegible] of 3 miles.

Castelmusskio bay.—The [illegible] buoy at the inner part of the bay, about 25 yards [illegible].

Page 136.—Stiphona bay.—Light.—A [illegible] light [illegible] 10 feet above high water, from a [illegible] tower, 30 feet high, on the [illegible] Isle Ornsay, and should be seen at a distance of 3 miles. The light is numbered, and is [illegible] during the [illegible] only.

Page 137.—[illegible] buoy [illegible] "A [illegible] and white light."

Mooring buoy.—A [illegible] buoy [illegible] 11 [illegible] water on [illegible].

Beacon buoy [illegible] 3 [illegible].

[illegible] buoy [illegible].

Page 138.—Shonis.—Beacon.—The [illegible] of the [illegible] S. Amelie is [illegible] removed, the [illegible].

[illegible] buoy [illegible].

Page 139.—LIGHT.—Cape Frowie light [illegible] a distance of 4 miles.

S. Cristofore cove.—Light.—A [illegible] light [illegible] at 21 feet above high water, on an iron tower, 16 feet high, on the north-western side of the entrance to S. Cristofore cove, and should be seen from a distance of 3 miles. The light is numbered.

LIGHT.—Dolsin islet.—[illegible]

LIGHT.—A [illegible] light, [illegible] is established, at the [illegible] above high water, from a [illegible] tower, 36 feet high, on the [illegible] of Dolsin islet, the [illegible] light should be seen from a distance of 12 miles, and the red at 8 miles. The light is [illegible]. For the [illegible] of the red sector, [illegible] Lamp [illegible] and the [illegible] should be [illegible] red at [illegible] and clear.

Page 140.—Hamnapik islet.—LIGHT.—A [illegible] light [illegible] is established, at 25 feet above high water, from a small red iron tower, 28 feet high, on the [illegible] of Hamnapik islet, and should be seen from a distance of [illegible]

Page 156 continued. Chart 2711.

light is unwatched, and is partially obscured from northward and southward by Lutostrak and Kamenjak islets.

Premuda island.—Light.—A *red fixed* light is exhibited, at 21 feet above high water, from a green lamp-post, 15 feet high, on the shore of Loza bay, which is situated on the north-east coast of Premuda island, about 8 cables south-eastward of Medvjak point, and should be seen from a distance of 3 miles. The light is unwatched.

Plan, Port Kreul, on sheet 1561.

Port Kreul.—Light.—A *red fixed* light is exhibited, at 20 feet above high water, from a green lamp-post, 18 feet high, on the northern molehead at Port Kreul, and should be seen from a distance of 4 miles. The light is unwatched.

Chart 2711, Gulf of Quarnero.

Vodenjak island.—LIGHT.—A *white flashing* light *every three seconds* is exhibited, at 29 feet above high water, from a red square tower with a gallery, 23 feet high, and should be seen from a distance of 9 miles. The light is unwatched.

Page 157.—Benusic rock.—LIGHT.—A *white group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 32 feet above high water, from a red conical tower, 28 feet high, on Benusic rock, which is situated about 2 cables south-eastward of the southern extreme of Isto island, and should be seen from a distance of 8 miles. The light is unwatched.

Port Isto mole.—Light.—A *green fixed* light is exhibited, at 18 feet above high water, from a green lamp-post, 16 feet high, on Port Isto mole, and should be seen from a distance of 2 miles. The light is unwatched.

LIGHT.—Zapuntello.—*Expunge* paragraph, and *substitute*:

LIGHT.—Vrana point.—A *red occulting* light is exhibited, at 42 feet above high water, from a red iron tower with a gallery, 29 feet high, situated 45 yards within Vrana point, the north extreme of the island, and should be seen from a distance of 4 miles. The light is unwatched.

Plan, Ports Berguglie, Lungo, and Manzo, on sheet 1561.

Rocks.—A rock, with 4½ fathoms water, lies a quarter of a mile northward of Biljavka point, on the east coast of Melada island.

A shoal with 5 fathoms water lies 6 cables south-westward of Stopanja point, the eastern point of Melada island.

LIGHT.—Zapuntello.—*Cancel* paragraph.

BERGUGLIE BAY.—The bottom in Vrulje cove, to the northward of Brguiski islet, is rocky, and unsuitable for anchorage.

Page 158.—LIGHT.—Port Lucina light in sight leads over the 5½-fathom shoal, as well as Bonaster rock, in Settebocche channel.

Page 158 continued. Plan on sheet 1561.

Zverinac island.—A patch, with $4\frac{3}{4}$ fathoms water, lies a quarter of a mile southward of Skrivada point.

LIGHT.—On north-west end of Tun Veliki island.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *occulting* light *every five seconds* (eclipse, *one second*), showing *red* and *white* sectors, is exhibited, at 88 feet above high water, from a white conical iron tower, 23 feet high, on the north-west end of Tun Veliki island, 40 yards inland; the *red* light should be seen from a distance of 8 miles, and the *white* of 12 miles. The light is unwatched.

For the sectors of the light, *see* Light list and chart. The *white* sectors indicate the passage between Bonaster point and Golac island, on the west, and that between Trata and Vrtlac islands, on the east.

Page 159.—Vrtlac islet.—A shoal with $5\frac{3}{4}$ fathoms water lies 3 cables north-westward of this islet.

There are heavy tide-rips to the southward of Vrtlac islet during the rising tide.

Glavica point.—Light.—A *green group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 29 feet above high water, from a red post, with platform, over a red cylindrical hut, 18 feet high, on Glavica point, the eastern entrance point of Port Manzo, and should be seen from a distance of 4 miles. The light is unwatched.

Chart 2711, Gulf of Quarnero.

LIGHTS.—*Cancel* third paragraph of section, and *substitute*:—

A *red fixed* light is exhibited, at 22 feet above high water, from the top of an iron hut, 20 feet high, on the head of the mole at Selve harbour, on the east coast of Selve island, and should be seen from a distance of 5 miles. The light is unwatched.

Arat point light should be seen from a distance of 5 miles; it is unwatched.

Page 160.—Port Ulbo.—LIGHT.—*Cancel* paragraph, and *substitute*:—

Light.—A *green fixed* light is exhibited, at 18 feet above high water, from a lamp-post, 16 feet high, on Port Ulbo molehead, and should be seen from a distance of 3 miles. The light is unwatched, is obscured over Kuriak island, and shows *white* towards the shore end of the mole.

Page 161.—Poklib islet.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white group flashing* light, showing a group of *three* flashes of *three-tenths of a second* each *every nine seconds*, eclipse between flashes *nine-tenths of a second*, between groups *six and three-tenths seconds*, is exhibited, at 52 feet above high water, from a white

[illegible]

Zeerinae island.—A [illegible], with [illegible] water, lie a [illegible] of a mile southward of [illegible] point.

LIGHT.—On [illegible] end of Tue [illegible] island—[illegible] paragraph, and substitute:—

LIGHT.—An occulting light [illegible] second, showing red and white sectors, is exhibited at 78 feet above high water, from a white conical iron tower, 25 feet high, on the northwest end of Tue Vedi island, 50 yards inland; the red light should be seen from a distance of 5 miles, and the white of 12 miles. The light is unwatched.

For the sectors of the light, see Lists and chart. The white sector includes the passage between Lomsenge point and Gabe island, on the west, and that between Tuta and Vitha islands, on the east.

Page 158.—Vitha islet.—A [illegible] with [illegible] water [illegible] of cables northwestward of this islet.

There are heavy tide rips to the southward of Vitha islet during the rising tide.

Olavica point.—Light.—A [illegible] occulting light [illegible] group of two flashes every [illegible], is established, at 20 feet above high water, from a red post, with platform, over a red [illegible] cylindrical hut, 18 feet high, on Olavica point, the eastern entrance point of Port Nissan, and should be seen from a distance of [illegible] miles. The light is unwatched.

(*Now* 27*A*, *Gulf of Genoa.*)

LIGHTS.—(*Insert* [illegible] *paragraph in section, and substitute:*—)

A red fixed light is exhibited, at 22 feet above high water, from the top of an iron hut, 20 feet high, on the head of the mole at Molfetta harbour, on the east coast of Salve island, and should be seen from a distance of 5 miles. The light is unwatched.

A fixed white light [illegible] seen from a distance of 5 miles; it is unwatched.

Page 160.—Port Vibo.—LIGHT.—(*Insert paragraph, and substitute:*—)

Light.—A [illegible] red light is established, at 15 feet above high water, from a lamppost, 10 feet high, on Port Vibo mole-head, and should be seen from a distance of 3 miles. The light is unwatched, is observed over Kurnah island, and shows white towards the shore and of the mole.

Page 161.—Pokhli islet.—LIGHT.—(*Insert paragraph, and substitute:*—)

LIGHT.—A white group flashing light, showing a group of three flashes at intervals of a second each every nine seconds, eclipse between flashes alternately of a second, between groups six and three-tenths seconds, is exhibited, at 28 feet above high water, from a white

Page 161 continued. Plan on sheet 1561.

iron conical tower, 34 feet high, on the summit of Poklib islet, and should be seen from a distance of 12 miles. The light is unwatched.

Chart 2774, Grossa island to Zirona channel.

Page 162.—Pago bay.—LIGHTS.—A *white occulting* light is exhibited, at 33 feet above high water, from a red iron post, 22 feet high, on S. Cristoforo point, and should be seen from a distance of 7 miles. The light is unwatched, and is obscured in Molacca channel to the northward of the point.

A *red occulting* light is exhibited, at 25 feet above high water, from a red iron post, 17 feet high, on S. Nicolo point, and should be seen from a distance of 4 miles; it is unwatched.

Harbour light.—*Cancel* paragraph, and *substitute*:—

Port Pago.—Leading lights.—A *red fixed* light is exhibited, at 21 feet above high water, from an iron post, 18 feet high, on the outer end of the North mole of Port Pago, and should be seen from a distance of 3 miles.

A *red fixed* light is exhibited, at 22 feet above high water, from an iron post, 18 feet high, situated 55 yards, S. 25° E., from the preceding light-post, and should be seen from a distance of 3 miles.

The lights are unwatched.

The lights in line, S. 25° E., lead into the inner anchorage through the channel marked by posts.

Cancel "**Light.**—A lighthouse is being built on St. Christoforo shoal."

Chart 2711, Gulf of Quarnero.

Tavernelle cove.—Light.—A *white fixed* light, with a *red* sector, is exhibited, at 29 feet above high water, from an iron lamp-post, 15 feet high, on the south point of Tavernelle cove; the *white* light should be seen from a distance of 5 miles, and the *red* light of 3 miles. The light is unwatched. For the *red* sector, which covers Mata shoal and the 3½-fathom shoal about 6 cables north-north-westward of it, *see* Light list and plan.

Port Novaglia.—Light.—*Cancel* paragraph, and *substitute*:

Light.—A *red fixed* light, with a *green* sector, is exhibited, at 19 feet above high water, from a lamp-post, 17 feet high, on the outer end of Port Novaglia mole; the *red* light should be seen from a distance of 3 miles, and the *green* light of 2 miles. The light is unwatched. For the *green* sector of the light, which leads in 2¾ fathoms water clear of the shoals off Points Gaja and Vrtlic, *see* Light list.

Port Simoni.—Light.—A *white fixed* light is exhibited, at 20 feet above high water, from an iron lamp-post, 15 feet high, on the point on the southern side of the entrance to the port, and should be seen from a distance of 5 miles. The light is unwatched.

[illegible]

[illegible] tower, [illegible] feet above the [illegible] and should be seen from a distance of 12 miles. The [illegible] is a [illegible].

[illegible] 177½ [illegible] above [illegible] to [illegible].

Page 163.—Pago bay.—LIGHTS.—[illegible] light is established, at 33 feet above high water, from a [illegible] 33 feet high, on St. Christoforo point. [illegible] should be seen from a distance of 7 miles. The light is [illegible] and is [illegible] to the northward of the point.

A [illegible] light is established, at 17 feet above the [illegible] iron post, 17 feet high, on St. Nicolo point. [illegible] should be seen at a distance of 4 miles [illegible].

Harbour lights.—[illegible]

Port Pago.—Leading lights.—A [illegible] light is established at 11 feet above high water, from a [illegible] 18 feet high, on the [illegible] of the North [illegible] Port Pago. [illegible] should be seen at a distance of 3 miles.

A [illegible] light is established, at 27 feet above high water, from a [illegible] post, 18 feet high, [illegible] 27 feet [illegible] the leading lights, and should be seen at a distance of 3 miles.

The lights are [illegible].

The [illegible] is [illegible] 8.25 ft. [illegible] the [illegible] is marked by [illegible].

[illegible] "Light.—A lighthouse [illegible] should."

[illegible] 177½ [illegible].

Traversetto cove.—Light.—A [illegible] light, with a red [illegible], is established, at 17 feet [illegible] high water, from an iron lamp post, 17 feet high, on the [illegible] point of Traversetto cove; the white light should be seen from a distance of 7 miles, and the red light 4 miles. The light is [illegible]. For the red sector, which covers Mr. [illegible] and the Middlebar shoal, about 4 miles north-westward of it, see Light [illegible].

Port Novaglia.—Light.—[illegible]

Light.—A red and [illegible] is established, at 17 feet above high water, from a lamppost, 17 feet high, on the [illegible] at Port Novaglia; [illegible] light should be seen from a distance of 3 miles; [illegible] 2 miles. The light is [illegible]. For the green sector of the light, which bears in 22 fathoms water, clear of the shoals of Fonta Cap and Vitello, see Light list.

Port Simoni.—Light.—A red and [illegible] is established, at 20 feet above high water, from an iron lamp post, 15 feet high, on the right on the [illegible] side [illegible] entrance to the [illegible] should be seen from a distance of 2 miles. The light is [illegible].

Chart 2711.

Page 163.—SKERDA ISLAND.—LIGHT.—The lighthouse is painted white.

Chart 2774, Grossa island to Zirona channel.

Port Cossion.—LIGHT.—*Cancel* paragraph, and *substitute*:

Light.—A *red fixed* light, with a *green* sector, is exhibited, at 16 feet above high water, from a lamp-post, 15 feet high, 120 yards eastward of Port Cossion mole; the *red* light should be seen from a distance of 3 miles, and the *green* of 2 miles. The light is unwatched. For the limits of the *green* sector, *see* Light list and chart.

Page 164.—PUNTADURA ISLAND.—LIGHTS.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white occulting* light *every nine seconds* (eclipse, *three seconds*) is exhibited, at 65 feet above high water, from a tower, 67 feet high, in the front part of a two-storied house on the west coast of Pentadura island, about 1½ miles from its north-western end, and should be seen from a distance of 13 miles. For the arc of visibility, *see* Light list.

Page 165.—Nona bay.—*Cancel* second paragraph, and *substitute*:—

The anchorage is about a mile from the head of the bay and 6 cables from the eastern shore, in about 7 fathoms water; small vessels anchor further in about 3 cables from the shore, in about 4 fathoms water. The Bora is violent here.

Chart 2711, Gulf of Quarnero.

Page 166.—Jablanaz.—Telephone.—There is a telephone office in the town.

Chart 2774, Grossa island to Zirona channel.

Page 167.—Kulina castle.—Shoal water extends about 3 cables south-westward of the point on which is the ruined castle of Kulina.

Venier castle.—Light.—The *white* light should be seen from a distance of 4 miles, and the *red* light of 3 miles.

CHAPTER VI.

Plan, Ports Berguglie, Lungo, and Manzo, on sheet 1561.

Page 169.—Baricev islet (rock).—There is a depth of 3¾ fathoms in the passage south-eastward of Baricev islet.

Plan, Port Tajer, on chart 2774.

Port Tajer.—Rock.—A rock, with 3¾ fathoms water, lies 3¼ cables north-westward of Galiola rock.

Plan on chart 2774.

Page 170.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light *every fifteen seconds*, showing thus:—*white* fixed, *seven seconds; white* flash, *eight seconds; white* fixed, *seven seconds; red* flash, *eight seconds*, is exhibited, at 156 feet above high water, from an octagonal iron tower, 85 feet high, painted red and white in spiral bands, situated 65 yards within the north-west extreme of the larger Sestrice island, and should be seen from a distance of 17 miles. View on chart 2774.

Tides.—It is high water, full and change, at Sestrice islands, at Vh. 7m.; springs rise 6 inches.

Chart 2774, Grossa island to Zirona channel.

Sale cove.—There is a conspicuous chapel, painted light blue, in the village at Sale cove.

Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *green fixed* light is exhibited, at 18 feet above high water, from a lamp-post, 12 feet high, on the end of the mole at Sale cove, and should be seen from a distance of 2 miles. The light is unwatched.

Page 171.—Zmanscica cove.—Light.—A *red fixed* light is exhibited, at 19 feet above high water, from a green lamp-post, 19 feet high, on the north shore of Zmanscica cove, and should be seen from a distance of 4 miles. The light is unwatched.

Luski or Luka island.—There is a conspicuous wind-motor, 90 feet high, situated above Luka village.

Luka point.—A shoal, with 3½ fathoms water, is situated near the north-east coast of Grossa island, 2 cables south-eastward of Luka point.

Rava island.—A shoal, with 4¼ fathoms water, lies half a mile northward of the north-western point of Rava island, and a shoal, with 3¾ fathoms water, 7 cables westward of the same point.

Rasip island.—A ridge, with from 3 to 5 fathoms water, lies between the east end of Rasip island and the 2-foot rock.

Mana island.—A shoal with 3¼ fathoms water lies about a cable, and a shoal, with 3 fathoms water, about 2½ cables, north-westward of the islet northward of Mana island.

Lavsa island.—A shoal, with 2 fathoms water, lies off the south-west coast of Lavsa island, a quarter of a mile north-westward of its south point.

Page 172.—Zut channel.—Shoals.—A shoal, with 3 fathoms water, lies one mile, N. ¾ W., from the larger Sversata island; and a shoal, with 3¾ fathoms water, lies near the coast of Incoronata

Page 172 continued. Chart 2774.

island, 6 cables south-westward from the north-west point of Zut island.

Chart 2711, Gulf of Quarnero.

MEZZO CHANNEL.—Sparesnjak island.—A shoal, with 4½ fathoms water, lies 2 cables south-south-eastward of Sparesnjak island, to which it is connected by a shallow ridge.

Chart 2774, Grossa island to Zirona channel.

Rocks.—A rock with 2¾ fathoms water lies about half a mile west-north-westward of Dikovica island (*Lat.43°53′N.,Long.15°21′E.*) A rock, with 3 fathoms water, lies about 3¼ cables S. by E. from Galiola rock, which lies about a mile south-eastward of Dikovica island.

Great Scala island.—Shoal.—A shoal of small extent, with 4½ fathoms water, lies a quarter of a mile eastward of the northern part of Great Scala island (*Lat. 43° 55′ N., Long. 15° 16′ E.*).

Page 173.—Rivanj island.—Light.—A *green flashing* light *every three seconds,* is exhibited, at 26 feet above high water, from a red post with platform, over a cylindrical hut, 18 feet high, on the east coast of Rivanj island, about 7 cables from its southern end, and should be seen from a distance of 4 miles. The light, which is unwatched, is partially or wholly obscured by land, except in the strait between Rivanj and Uglian islands, and over the low part of Point S. Pietro.

Page 174.—LIGHT.—Port Komasovo.—A *red fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 16 feet high, on the molehead at Port Komasovo, on the north-east coast of Eso island, about half a mile south-eastward of Knezak island, and should be seen from a distance of 3 miles. The light is unwatched.

UGLIAN ISLAND.—Shoal.—A shoal of small extent, with 3¾ fathoms water, is situated off the west coast of Uglian island, about three-quarters of a mile southward of Prkljuk cove; there is a depth of 5½ fathoms inside the shoal.

LIGHTS.—San Pietro point.—*Cancel* this paragraph.

Lukoran cove.—A *green fixed* light is exhibited, at 21 feet above high water, from a lamp-post, 18 feet high, on the north-western end of the mole in Lukoran cove, and should be seen from a distance of 2 miles. The light is unwatched.

Oltre.—*Cancel* paragraph, and *substitute*:—

Oltre.—A *green fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 13 feet high, on the molehead at Oltre, westward of the north end of Calogera island, and should be seen from a distance of 2 miles. The light is unwatched.

Kuklica bay.—A *red fixed* light is exhibited, at 15 feet above high water, from a green lamp-post, 17 feet high, on the northern

[illegible]

[illegible] island, 6 miles south-eastward from [illegible] island.

[illegible] (Map of Quarter).

MEZZO CHANNEL.—Bravenera Island.—A [illegible] with 4½ fathoms water, lies 2 miles south-westward of Bravenera island, to which it is connected by a shallow ridge.

[illegible] (Map of Mezzo Channel).

Rocks.—A rock with 2½ fathoms water, lies about half a mile west-north-westward of Hibiscus island [illegible]

A rock, with 3 fathoms water, lies about [illegible] miles S. by E. from Gaichi rock, which lies about a mile [illegible] of Hibiscus island.

Great Scale island.—Shoal.—A small shoal, with 4½ fathoms water, lies a quarter of a mile eastward of the northern point of Great Scale island. [illegible]

Page 175.—Rivani island.—Light.—A [illegible] is exhibited, at 70 feet above high water, [illegible] a small post with platform, over a cylindrical [illegible] on the east coast of Rivani island, about 1 mile from its northern end, and should be seen from a distance of 4 miles. The light, which is unwatched, is partially or wholly obscured by land, except in [illegible] between Rivani and Tylan islands, and over the [illegible] Point S. Pietro.

Page 177.—LIGHT.—Fort Komasovo.—A [illegible] is exhibited, at 17 feet above high water, from a lamp-post, 12 feet high, on the redoubt at Fort Komasovo, on the [illegible] Ilon island, about half a mile south-eastward of Kosaro island, and should be seen from a distance of 6 miles. The light is unwatched.

UGLIAN ISLAND.—Shoal.—A shoal of small extent, with 3½ fathoms water, is situated at the west coast of Uglian island, about three-quarters of a mile southward of Pirkish point. There is a [illegible] of 1½ fathoms inside the shoal.

LIGHTS.—San Pietro point.—[illegible] this peninsula.

Luborna cove.—A [illegible] light is exhibited, at 22 feet above high water, from a lamp-post, 18 feet high, on the [illegible] western end of the mole in Luborna cove, and should be seen from a distance of 2 miles. The light is unwatched.

Oltre.—[illegible] paragraph, and [illegible]

Oltre.—A [illegible] light is exhibited, at 17 feet above high water, from a lamp-post, 13 feet high, on the redoubt at Oltre, westward of the north end of Calcora island, and should be seen from a distance of 2 miles. The light is unwatched.

Kublice bay.—A red [illegible] light is exhibited, at 17 feet above high water, from a green lamp-post, 17 feet high [illegible]

Page 174 continued. Chart 2774.

entrance point of Kuklica bay, and should be seen from a distance of 3 miles. The light is unwatched.

Page 175.—Beacon.—A square stone beacon, 6 feet high, stands in 7 feet water about half a cable southward of S. Pietro point, on the east coast of Uglian island, nearly a mile south-eastward of S. Gregorio point, Port S. Eufemia.

Telegraph.—There is a post and telegraph office at Ugliano (Uglian), on the east coast of the island, about $2\frac{4}{10}$ miles south-eastward from its north-western extreme.

PASMAN ISLAND.—S. Luka cove.—Light.—A *green fixed* light is exhibited, at 17 feet above high water, from a green lamp-post, 16 feet high, on the head of the mole in S. Luka cove, which is situated on the north-east coast of Pasman island about 8 cables from its northern point, and should be seen from a distance of 2 miles. The light is unwatched.

Soline cove.—The bottom in the central part of Soline cove is rocky, and only the northern and south-eastern parts of the cove are suitable for anchorage.

Shoal.—From Borovnjak point, a rocky bank with 2 fathoms water, extends a quarter of a mile southward.

Page 176.—Petrcani.—Light.—The *white* light exhibited from Radman point should be seen from a distance of 4 miles, and the *red* light of 3 miles. The light is unwatched.

Telephone.—There is a telephone station at Petrcani.

Plan, Port Zara, on chart 2774.

PORT ZARA.—Franz Joseph mole is on the south-west side of the peninsula on which the town stands. It is 984 yards long, with 5 feet water alongside, and a mole in the middle of it is 87 yards long, with $14\frac{1}{2}$ feet water alongside.

Buoys and beacons.—*Second* paragraph: *Cancel* "There are two other mooring buoys further up the harbour; also two warning buoys," and *substitute* There is one mooring buoy further up the harbour.

Harbour works are in progress on a part of the shore in Port Zara, and steam vessels must pass them at very slow speed.

Page 177.—Zara town.—The population of the town was 14,376 in 1912.

LIGHTS.—Mika point.—The light at Mika point should be seen from a distance of 8 miles.

Fog signal.—*Cancel* paragraph, and *substitute*:—

Fog signal.—A bell on Mika point is struck *once every fifteen seconds.*

Harbour regulations.—The house from which the signals are shown is situated on the north point of Zara sea wall.

[illegible] (Page 174).

[illegible] point of Kinkina [illegible] should be seen from a distance of 3 miles. The light is unwatched.

Page 175.—Beacon.—A [illegible] stone beacon, 6 feet high, stands in 7 feet water about half a mile westward of N. Ferro point, on the east coast of Eylan island, nearly a mile southeastward of N. Geographic point, Port N. Blair.

Telegraph.—There is a post and telegraph office at Eylan [illegible], on the east coast of the island, about 2½ miles southeastward from its northwestern extreme.

PASSMAN ISLAND.—S. Inaka cove.—Light.—A [illegible] light is exhibited, at 17 feet above high water, from a green [illegible], 18 feet high, on the head of the pier in S. Inaka cove, which is situated on the northeast coast of Passman island about [illegible] from its northern point, and should be seen from a distance of 3 miles. The light is unwatched.

Solitre cove.—The bottom in the central part of Solitre cove is rocky, and only the northern and southeastern parts of the cove are available for anchorage.

Sikoni.—Iron Incorgible point, a rocky bank with 2 fathoms water, extends a quarter of a mile southward.

Page 176.—Peteroani.—Light.—The [illegible] light exhibited from Peteroani point should be seen from a distance of a mile, and the light of 3 miles. The light is unwatched.

Telephone.—There is a telephone station at Peteroani.

[illegible] (Page 176).

PORT NAKA.—Port Anna Maria bay is on the southwest side of the peninsula on which the town stands. It is 884 yards long, with 5 fathoms water alongside, and a rock in the middle of it is 87 yards long, with 7½ feet water alongside.

Buoys and beacons.—[illegible] paragraph: (Same.) There are two other mooring buoys within the harbour: also two warning buoys, red and white. There is one mooring buoy further up the harbour.

Harbour works are in progress on a part of the shore in Port Naka, and stone weak and pier dam at very slow speed.

Page 177.—Naka town.—The population of the town was 14,876 in 1912.

LIGHTS.—Mike point.—The light at Mike point should be seen from a distance of 3 miles.

Fog signal.—(Same paragraph, and substitute:—

Fog signal.—A bell on Mike point is struck once every fifteen seconds.

Harbour regulations.—The buoys from which the signals are shown is situated on the north point of Naka sea wall.

Plan on chart 2774.

Page 178.—Current.—In the Zara channel the current sets north-west and south-east, with strong winds in those directions, and attains rates up to 3 miles an hour. The current must be guarded against when going alongside Franz Joseph mole.

Tides.—It is high water, full and change, at Zara, at VIIh. 55m.; springs rise 6 inches.

Salvage.—*Cancel* paragraph.

Shipping.—In 1912, 4,554 steam vessels, of 1,180,540 tons, entered and cleared, and 241 sailing vessels, of 7,423 tons, entered the port of Zara.

Plan, Pasman strait, on chart 2774.

Page 179.—LIGHTS.—Babac island.—*Cancel* paragraph, and *substitute*:—

Babac island.—A *white fixed* light is exhibited, at 25 feet above water, from a stone tower on a hut, 25 feet high, on the west point of Babac island, and should be seen from a distance of 8 miles. For the arc of visibility of the light, *see* Light list.

S. Filippo e Giacomo.—A *red fixed* light is exhibited, at 17 feet above high water, from a green lamp-post, 16 feet high, on the head of the South mole of S. Filippo e Giacomo, and should be seen from a distance of 3 miles. The light is unwatched.

Pasman.—*Cancel* paragraph, and *substitute*:—

Pasman.—A *red occulting* light *every fifteen seconds* is exhibited, at 17 feet above high water, from an iron lamp-post, 17 feet high, on the head of the mole at Pasman, and should be seen from a distance of 4 miles. The light is unwatched.

Cavata islet.—The light framework is in 1½ fathoms water, and is 32 feet high; the light should be seen from a distance of 4 miles. Babac and Cavata lights in line, S. 29° E., clear the shoal off Brizine point and the 3-fathom patch north-westward of Babac, known as Gorzkowsky bank.

Tkon.—An *orange* coloured *fixed* light is exhibited, at 18 feet above high water, from a green lamp, 16 feet high, on the eastern molehead at Tkon, and should be seen from a distance of 3 miles. The light is unwatched.

Zara Vecchia.—*Cancel* paragraph, and *substitute*: —

Zara Vecchia.—A *green fixed* light, with a *red* sector, is exhibited, at 20 feet above high water, from a lamp-post, 17 feet high, on the north-west molehead at Zara Vecchia, and should be seen from a distance of 2 miles. The light is unwatched. For the limits of the *red* sector, which covers Kocensko shoal, *see* Light list and plan.

[illegible] about 5°[illegible].

Page 178.—Current.—[illegible] motion [illegible] northwest and southeast with strongest set in these directions, [illegible] attains rate of [illegible] knots. The [illegible] is generally against wind [illegible].

Tides.—It is high water, [illegible] and change of Zara [illegible] springs rise 6 feet [illegible].

Salvage.—[illegible] paragraph.

Shipping.—In [illegible] 4,024 [illegible] entered and cleared, and 3,[illegible] sailing vessels [illegible] port of Zara.

[illegible] from [illegible] and [illegible].

Page 179.—LIGHTS.—Babac island.—[illegible] paragraph and subdivisions:—

Babac island.—A [illegible] light [illegible] 22 feet above water, from a stone tower [illegible] 37 feet high, [illegible] point of Babac island, and should be seen [illegible] 12 miles. The [illegible] are of visibility of the light, see Light [illegible].

S. Filippo e Giacomo.—A [illegible] light is established, 17 feet above high water, from a green lamp post [illegible] high on the head of the south mole of S. Filippo e Giacomo, [illegible] should be seen from a distance of 5 miles. The light [illegible].

Pasman.—[illegible] paragraph [illegible].

Pasman.—A revolving light [illegible] established at 17 feet above high water, from an iron lamp post, 37 feet high, on the head of the mole at Pasman, and should be seen from a distance of 4 miles. The light is unvaried.

Cavata islet.—The light framework is in 37 fathoms water, and is 22 feet high; the light should be seen from a distance of 4 miles. Babac and Cavata light in line, S. 22° E., clear the shoal of Babac point and the 4 fathom patch north-eastward of Babac, [illegible] Gardenovsky bank.

Tkon.—A [illegible] colored fixed light is established at 17 feet above high water, from a green lamp, 14 feet high, on the mole [illegible] at Tkon, and should be seen from a distance of 4 miles. The light is unvaried.

Zara Vecchia.—[illegible] paragraph [illegible].

Zara Vecchia.—A green fixed light, [illegible] established, at 20 feet above high water, from a lamp post, 17 feet high, on the southwest mole at Zara Vecchia, and should be seen from a distance of 2 miles. The light is unvaried. For the lights of the port of Zara, which cover Zemonico shoal, see Light list and plan.

Chart 2774, Grossa island to Zirona channel.

Page 180.—LIGHTS.—Moll rock light, *see* page 181.

Babuljac island.—A *red occulting* light is exhibited, at 28 feet above high water, from a red iron framework, 25 feet high, on the southern extreme of Babuljac island, and should be seen from a distance of 4 miles; it is unwatched.

Pukostiane (Pakostane).—A *green fixed* light is exhibited, at 14 feet above high water, from a lamp-post, 12 feet high, on the East molehead of Pukostiane harbour, and should be seen from a distance of 2 miles. The light, which shows *white* towards the pier, is unwatched, and cannot be lit during south-easterly gales.

Artice islets.—A *green group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 24 feet above high water, from a red pillar, with a platform, over a red cylindrical hut, 24 feet high, on the western side of the western Artice islet, and should be seen from a distance of 5 miles. The light is unwatched.

Kusia reef.—A *white occulting* light is exhibited, at 22 feet above high water, from a red iron frame beacon on a concrete block, in 10 feet water, on Kusia reef, the bank connecting Great Arta island and the mainland, 350 yards north-eastward from the island, and should be seen from a distance of 7 miles. The light is unwatched.

Malaluka point.—A *red fixed* light is exhibited, at 25 feet above high water, from a red iron framework, 24 feet high, on Malaluka point, the eastern point of Malaluka cove (or the western point of Velikoluka cove), and should be seen from a distance of 3 miles. The light is unwatched.

Tegine island.—A *green fixed* light is exhibited, at 22 feet above high water, from a red iron framework, 22 feet high, on the bank close eastward of Tegine island, and should be seen from a distance of 3 miles. The light is unwatched.

Rat point.—A *white fixed* light is exhibited, at 22 feet above high water, from a red iron framework, 22 feet high, on Rat point, the eastern point of the north entrance to Morter channel, and should be seen from a distance of 5 miles. The light is unwatched.

Page 181.—Kamicac rock (Moll rock [islet]).—Light.—A *green flashing* light *every three seconds* is exhibited from a lighthouse on Moll rock; it is unwatched. No other details have been given.

Plan, Morter bay on sheet 1581.

Kukuljar islets.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *red occulting* light *every five seconds* (eclipse, *two seconds*) is exhibited, at 42 feet above high water, from a platform

[illegible], [illegible] [illegible] [illegible].

Page 180.—LIGHTS.—[illegible] [illegible] page 181.

Babuitan island.—A [illegible] light is exhibited, at 24 feet above high water, from a red iron framework, 22 feet high, on the southern extreme of Babuitan Island, and should be seen from a distance of 4 miles. It is a [illegible].

Pukosisang (Pakosisang).—A [illegible] light is exhibited, at 16 feet above high water, from a lighthouse, 22 feet high, on the East point of Pukosisang Island, and should be seen from a distance of [illegible] miles. The light, which shows white towards the pier, is [illegible], and cannot be [illegible] northwesterly gales.

Arrice islets.—A [illegible] flashing light, showing a group of [illegible] islets, is exhibited, at 24 feet above high water, from a red pillar, with a platform, over a red rectangular iron 16 feet high, on the western side of the western Arrice islet, and should be seen from a distance of 7 miles. The light is [illegible].

Kusis reef.—A [illegible] flashing light is exhibited, at 22 feet above high water, from a red iron frame based on a concrete block, in 10 fathoms, on Kusis reef, the bank connecting Great Arrice island and the mainland, [illegible] northeastward from the island, and should be seen from a distance of 7 miles. The light is unwatched.

Malalubia point.—A red [illegible] light is exhibited, at 20 feet above high water, from a red iron framework, 24 feet high, on Malalubia point, the eastern point of Malalubia cove on the western point of Malalubia cove, and should be seen from a distance of 3 miles. The light is unwatched.

Teqino island.—A [illegible] light is exhibited, at 22 feet above high water, from a red iron framework, 22 feet high, on the bank close [illegible] of Teqino Island, and should be seen from a distance of 3 miles. The light is unwatched.

Tut point.—A [illegible] light is exhibited, at 22 feet above high water, from a red iron framework, 22 feet high, on Tut point, the eastern point of the north entrance to Mayter channel, and should be seen from a distance of 3 miles. The light is unwatched.

Page 181.—Kanukoa rock (Bell rock [islet]).—Light.—A [illegible] light, [illegible] is exhibited from a light-house on [illegible] rock [illegible]. No other details have been given.

[illegible] [illegible].

Kukuljar islets.—LIGHT.—[illegible] [illegible], and [illegible].

LIGHT.—A red [illegible] light [illegible] the [illegible] (Quiniro) [illegible] is exhibited, at 44 feet above high water, from [illegible]

Page 181 continued. Plan on sheet 1581.

and cage over a gasometer, 40 feet high, on the eastern Kukuljar islet, and should be seen from a distance of 10 miles. The light is unwatched.

Maslinak island.—Light.—A *green group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 57 feet above high water, from a red conical iron tower, 24 feet high, on the west point of Maslinak island, and should be seen from a distance of 5 miles. The light is unwatched.

Page 182.—Lights.—*Cancel* first paragraph, and *substitute*:—

Two small *fixed* lights are exhibited from lamp-posts on the buttresses of the swing bridge; the northern light is *red;* the southern light is *red* when the bridge is closed, and *green* when it is open.

The *red fixed* light shown from Stretto molehead is unwatched.

Chart 2774, Grossa island to Zirona channel.

Page 183.—The light on Hrbosnjak should be seen from a distance of 4 miles.

Plan 1581, Approaches to Port Sebenico.

Page 184.—LIGHT.—Tiascica point.—*Cancel* both paragraphs, and *substitute*:—

LIGHT.—A *white group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 39 feet above high water, from an iron post with a gallery over a gasometer, 26 feet high, about a cable north-westward of Tiascica point, and should be seen from a distance of 9 miles. The light is unwatched.

Page 185.—Port Zlarin.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *green fixed* light is exhibited, at 21 feet above high water, from an iron lamp-post, 18 feet high, on the head of the mole in Port Zlarin, and should be seen from a distance of 2 miles. The light is unwatched.

Rozenik rock.—LIGHT.—The light exhibited from Rozenik rock should be seen from a distance of 8 miles.

Sestre bank.—The *red* sector of Tiascica point light covering Sestre bank has been discontinued.

Page 186.—There is a post and telegraph office at Luka, situated at the head of Luka harbour, on the south-eastern coast of Provicio island.

Trebocconi.—Light.—A *green fixed* light is exhibited, at 19 feet above high water, from an iron lamp-post, 18 feet high, on Trebocconi quay, in the north-western part of Vodice road, and should be seen from a distance of 3 miles. The light is unwatched.

Vodice.—Light.—The *red fixed* light exhibited from the South mole of Vodice should be seen from a distance of 3 miles; it is unwatched.

Page 181 continued. Plan on sheet 1850.

and age over a gasometer, at a fort high, on the eastern Kinnaber Islet, and should be seen from a distance of 10 miles. The light is unwatched.

Maskinnak Island.—Light.—A green group flashing light, showing a group of two flashes every 20 seconds, is exhibited, at 37 feet above high water, from a red conical iron tower, 24 feet high, on the west point of Maskinnak Island, and should be seen from a distance of 5 miles. The light is unwatched.

Page 182.—**Lights.**—Insert first paragraph, and substitute:—

Two small red lights are exhibited from lamp-posts on the bridges of the swing bridges: the northern light is next the southern light is red when the bridge is closed, and green when it is open.

The red fixed light shown from Stretto inclosed is unwatched.

Insert 2177A, Grassy Islet to Xiroos channel.

Page 183.—The light on Hibscopik should be seen from a distance of 4 miles.

After 2182, Insert new paragraphs to read as follows.

Page 184.—**LIGHT.—Tiascica point.**—Insert first paragraph, and substitute:—

LIGHT.—A white group flashing light, showing a group of two flashes every 20 seconds, is exhibited, at 30 feet above high water, from a post with a gallery over a gasometer, 12 feet high, known as the north-western of Tiascica point. It should be seen from a distance of 5 miles. The light is unwatched.

Page 185.—**Fort Zlarin.—Light.**—Insert paragraph, as follows:—

Light.—A green fixed light is exhibited, at 27 feet above high water, from an iron lamp-post, 15 feet high, on the head of the pier at Fort Zlarin, and should be seen from a distance of 3 miles. The light is unwatched.

Rozenik rock.—LIGHT.—The light exhibited from Rozenik rock should be seen from a distance of 5 miles.

Sestre bank.—The red sector of Tiascica point light covering Sestre bank has been discontinued.

Page 186.—There is a post and telegraph office at Lubin, situated at the head of Lubin harbour, on the south-eastern coast of Prevlaka island.

Trebocconi.—Light.—A green fixed light is exhibited, at 32 feet above high water, from an iron lamp-post, 18 feet high, on Trebocconi quay, in the north-western part of Valdes road, and should be seen from a distance of 3 miles. The light is unwatched.

Vodice.—Light.—The red fixed light exhibited from the south mole of Vodice should be seen from a distance of 3 miles; it is unwatched.

Chart 2774, Grossa island to Zirona channel.

Page 187.—Krapano island.—Shoal water extends nearly half a mile south-westward of Krapano island.

Telegraph.—There is a telegraph office in Krapano harbour connected to the mainland by cable.

Plan 1581, Approaches to Port Sebenico.

Beacons.—There are two stone beacons on the bank extending north-westward from Krapano island; the eastern beacon is situated 7 cables north-westward of the north extreme of the island, and the western beacon 120 yards, S. 75° W., from the eastern beacon.

Page 188.—First paragraph: Kobila rocks are marked by a light-beacon. *See* below.

Cancel "Placena shoal extending off the south point of the inner end of the channel is marked by a square beacon," and *substitute* Paklena bank extends about 1¼ cables north-eastward within the south inner entrance point of the channel.

LIGHTS.—*Cancel* section, and *substitute*:—

LIGHTS.—Jadria point.—A *red fixed* light is exhibited, at 25 feet above high water, from an octagonal stone tower on a house, 27 feet high, on Jadria point, the southern end of the islet on the northern side of the entrance of San Antonio channel, and should be seen from a distance of 5 miles. For the arc of visibility, *see* Light list and chart.

Rocni rock.—A *green group flashing* light, showing groups of *two* flashes *every six seconds*, is exhibited, at 21 feet above high water, from a red post with platform on a cylindrical beacon, 23 feet high, on Rocni rock, the north-western Kobila rock, and should be seen from a distance of 4 miles. The light is unwatched.

Fort San Nicolo.—A *green fixed* light is exhibited, at 43 feet above high water, from the north-western side of Fort S. Nicolo wall, and should be seen from a distance of 4 miles. For the arc of visibility, *see* Light list and plan.

Fog signal.—A hand fog horn gives *five* short blasts in quick succession *every minute*.

Debela point.—A *red flashing* light *every two seconds* is exhibited, at 21 feet above high water, from a red pillar with a platform on a cylindrical hut, 22 feet high, on Debela point, and should be seen from a distance of 5 miles. The light is unwatched.

Senisna point.—A *green occulting* light is exhibited, at 15 feet above high water, from a red iron post on a beacon, 15 feet high, in 16 feet water off Senisna point, and should be seen from a distance of 3 miles. The light is unwatched, and is visible from N. 62° E., through east, to S. 88° W.

(Chart 1713), closer inland to Kirapano (Chart 1).

Page 187.—Kirapano island.—Shoal water extends nearly half a mile south-westward of Kirapano island.

Telegraph.—There is a telegraph from Kirapano harbour connected to the mainland by cable.

(See 1561, Approaches to Port Stanley.)

Beacons.—There are two stone beacons on the bank extending north-westward from Kirapano island; the eastern beacon is situated 7 cables north-westward of the north extreme of the island, and the western beacon 120 yards, S. 73° W., from the eastern beacon.

Page 188.—Four pentagonal Kitlin rocks are marked by a light vessel. See below.

(Chart 1) There is shoal extending on the north point of the lower end of the channel to Stanley by a square beacon, and between Fitzroy bank extends about 11 cables north-westward within the south inner entrance point of the channel.

LIGHTS.—Moved entirely and as follows:—

LIGHTS.—Jackrin point.—A red fixed light is exhibited, at 30 feet above high water, from a cylindrical tower on a house, 27 feet high, on Jackrin point, the southern end of the isle on the eastern side of the entrance of San Francisco channel, and should be seen from a distance of 3 miles. The light is visible, and light the sand dunes.

Hoont rock.—A green group flashing light, showing groups of two flashes every 5 seconds, is exhibited at 21 feet above high water, from a red post with lantern on a cylindrical house, 28 feet high, on Hoont rock, in a north-east from Kirkin rock, and should be seen from a distance of 7 miles. The light is unwatched.

Fort San Nicolo.—A green fixed light is exhibited, at 43 feet above high water, from the north-eastern side of Fort S. Nicolo wall, and should be seen from a distance of 4 miles. For the use of vessels lying in Port Stanley, see plan.

Fog signal.—A bell fog horn, given the above bearing in place of explosion fog signal.

Bobola point.—A red flashing light every two seconds is exhibited, at 21 feet above high water, from a red pillar with a platform on a cylindrical box, 22 feet high, on Bobola point, and should be seen from a distance of 7 miles. The light is unwatched.

Sensuna point.—A green occulting light is exhibited, at 15 feet above high water, from a red iron post on a lantern, 15 feet high, in 7 feet water off Sensuna point, and should be seen from a distance of 3 miles. The light is unwatched, and is visible from N. 67° E. through east, to S. 53° W.

Page 188 continued. Plan 1581.

S. Antonio point.—A *green fixed* light is exhibited, at 17 feet above high water, from a red iron post, 14 feet high, on S. Antonio point, and should be seen from a distance of 2 miles. The light is unwatched.

Sta. Croce point.—A *red occulting* light is exhibited, at 19 feet above high water, from a red iron post, 18 feet high, near the chapel on Sta. Croce (Kriz) point, and should be seen from a distance of 3 miles. The light is unwatched.

Paklena bank.—A *green group flashing* light, showing a group of *three* flashes *every five seconds*, is exhibited, at 19 feet above high water, from a red post with platform over a cylindrical hut, 22 feet high, situated in 3 feet water on the north-eastern part of Paklena bank, and should be seen from a distance of 4 miles. The light is unwatched.

Port Sebenico.—A *red fixed* electric light is exhibited, at 17 feet above high water, from a lamp-post, 16 feet high, on the head of Port Sebenico mole, and should be seen from a distance of 2 miles. The light is unwatched.

Buoy.—A white conical buoy, surmounted by a ball, is moored on the outer end of the shoal extending from the coaling wharf at Port Sebenico, south-westward of the railway station.

Mooring buoys.—There are several mooring buoys in the port, *see* plan.

Traffic regulation.—The limits of San Antonio channel are defined by lines between Jadria point and Rocni rock light-beacon, on the west, and between Turan point and Paklena light-beacon, on the east.

Traffic through the channel is regulated by signals shown from Fort St. Anna and Fort St. Nicolo, those from the former station relating to out-going vessels, and those from the latter to in-coming.

Signals.—Two black balls, placed vertically, by day, or two *green* lights, placed vertically, at night, indicate that the channel is clear.

A red cone, by day, or two *red* lights, placed vertically, at night, indicate that the channel is closed.

Steam vessels of 200 tons gross tonnage and upwards, and sailing vessels of 100 tons and upwards, together with vessels in tow, when the length from the bow of the tug to the stern of the vessel towed exceeds 330 feet, if desirous of passing through the channel, must hoist by day the International code signal flag H, or at night exhibit two lights, placed vertically, the upper *red* and the lower *white*, such signals to be made by out-going vessels immediately before getting under way, and by in-coming vessels before arriving at the entrance to the channel.

Type 3a4 metal mast. Fog bell.

S. Antonio point.—A green metal light is established, at 17 feet above high water, from a red iron post, in line with the S. Antonio island, and should be seen from a distance of 3 miles. The light is unwatched.

Sta. Cruce point.—A red revolving light is established, at 12 feet above high water, from a red iron post, 12 feet high, near the shoal on Sta. Cruce Sikiki point, and should be seen from a distance of 3 miles. The light is unwatched.

Pahiona bank.—A green revolving light, showing a green of three flashes every [illegible] is established, at 17 feet above high water, from a red iron with platform over a [illegible] tun, 22 feet high, situated in 3 feet water on the north eastern part of Pahiona bank, and should be seen from a distance of 4 miles. The light is unwatched.

Fort Sebenico.—A red fixed electric light is established, at 17 feet above high water, from a long post, 11 feet high, on the head of Fort Sebenico mole, and should be seen from a distance of 3 miles. The light is unwatched.

Buoy.—A white conical buoy, surmounted by a ball, is moored at the outer end of the shoal extending from the coaling wharf at Fort Sebenico, north-westward of the railway station.

Mooring buoys.—Three are moored in coaling bunker in the port, see plan.

Traffic regulation.—The limits of the Antivari channel are defined by lines between Jadric point and fixed red light beacon, on the west, and between Tarac point and fixed white light-beacon, on the east.

Traffic through the channel is regulated by signals shown from Fort St. Ana and Fort St. Nikola, upon the harbor station relating to outgoing vessels, and there from the latter to incoming.

Signals.—Two black balls placed vertically, or two green lights, placed vertically at night, indicate that the channel is clear.

A red cone by day, or two red lights, placed vertically at night, indicate that the channel is closed.

Steam vessels of 500 tons gross tonnage and upwards, and sailing vessels of 100 tons and upwards, together with vessels in tow, when the length from the bow of the tug to the stern of the vessel towed exceeds 300 feet, if desirous of passing through the channel, must hoist by day the International code signal flag H, or at night exhibit two lights, placed vertically, the upper red and the lower white, such signals to be made by outgoing vessels immediately before getting under way, and by incoming vessels before arriving at the entrance to the channel.

Page 188 continued. Plan 1581.

Should a vessel disregard the above signals, the International code signal "M.N." will be hoisted, and a gun fired.

Vessels, other than those above referred to, can proceed through the channel, without regard to the signals, but must make way for those regulated by them.

Page 189.—Tides.—*Cancel* paragraph, and *substitute*:—

Tides.—It is high water, full and change, at Sebenico, at IVh. 38m.; springs rise 6 inches.

Sebenico.—The civil population of the town was about 13,000 in 1912.

Coal and supplies.—There are two electric travelling cranes on the coaling wharf for loading coal, and there are three lighters of from 10 to 15 tons. The water can be obtained from hydrants on the town quay.

Time signal.—A gun is fired at noon, Standard mean time, or 23h. 0m. 0s. Greenwich mean time, daily, from Sta. Anna station.

Wireless telegraph.—A wireless telegraph station at Sebenico is always open to the public; the call letters are O.H.B.

Shipping.—In 1912, 3,292 steam vessels, of 734,189 tons, and 511 sailing vessels, of 26,775 tons, entered the port of Sebenico.

Chart 2774, Grossa island to Zirona channel.

Page 190.—Kerka river is navigable to the foot of the falls.

Proklian lake.—Lights.—Vukinac point.—A *red fixed* light is exhibited, at 13 feet above high water, from a red iron pillar, 14 feet high, on Vukinac point, the inner northern entrance point of the channel leading from Kerka inlet into Proklian lake, and should be seen from a distance of 3 miles.

Ostrica point.—A *red fixed* light is exhibited, at 13 feet above high water, from a red iron post, 14 feet high, on Ostrica point, the southern entrance point of Kerka river, in Proklian lake, and should be seen from a distance of 3 miles.

These lights are unwatched.

Plan, Port Capočesto, on chart 2774.

PORT CAPOČESTO.—LIGHT.—Kremik point.—*Cancel* paragraph, and *substitute*:—

LIGHTS.—A *white flashing* light *every three seconds* is exhibited, at 33 feet above high water, from a red conical iron turret with a gallery, 28 feet high, on Kremik point, and should be seen from a distance of 11 miles. The light is unwatched. For the arc of visibility, *see* Light list.

A *red fixed* light is exhibited, at 17 feet above high water, from an iron lamp-post, 16 feet high, on Capočesto molehead, and should be seen from a distance of 3 miles. The light is unwatched.

Page 185.—Tides.—[illegible]

Tides.—It is high water, full and change, at Sebenico, at 7h. 38m.; springs rise 6 inches.

Sebenico.—The civil population [illegible] was about 12,000 in 1912.

Coal and supplies.—There are no electric travelling cranes in the coaling wharf for loading coal, and there are three lighters of from 10 to 15 tons. The water can be obtained from hydrants on the town quay.

Time signal.—A gun is fired at noon, Standard mean time, or 23h. 0m. Greenwich mean time, daily, from Sta. Anna station.

Wireless telegraph.—A wireless telegraph station at Sebenico is always open to the public; the call letters are G.H.R.

Shipping.—In 1912, 3,282 steam vessels of 781,159 tons, and 511 sailing vessels of 26,775 tons, entered the port of Sebenico.

Chart 1174, Cross Island to Ancona channel.

Page 186.—Zerka river is navigable to the foot of the falls.

Prokljan lake.—**Lights.**—**Vrulikina point.**—A red fixed light is exhibited, at 18 feet above high water, from a red iron pillar, 14 feet high, on Vrulikina point, the inner northern entrance point of the channel leading from Krka lake into Prokljan lake, and should be seen from a distance of 3 miles.

Ostrica point.—A red fixed light is exhibited, at 13 feet above high water, from a red iron post, 14 feet high, on Ostrica point, the southern entrance point of Krka river, in Prokljan lake, and should be seen from a distance of 3 miles.

These lights are unwatched.

Plan, Port Capodestro, on chart 2272.

PORT CAPODISTO.—LIGHT.—Kremik point.—

Owned paragraph and substitute:—

LIGHTS.—A white flashing light every three seconds is exhibited, at 33 feet above high water, from a red conical iron turret with a gallery, 28 feet high, on Kremik point, and should be seen from a distance of 11 miles. The light is unwatched. For the arc of visibility, see Light list.

A red fixed light is exhibited, at 17 feet above high water, from an iron lamp-post, 16 feet high, on Capodesto mole-head, and should be seen from a distance of 3 miles. The light is unwatched.

Plan, Port Rogoznica, on chart 2774.

Page 191.—PORT ROGOZNICA.—The passage northward of Rogoznica islet is navigable, a ruined dam which obstructed it having been removed.

LIGHT.—*Cancel* paragraph, and *substitute*:—

Lights.—A *red fixed* light is exhibited, at 50 feet above high water, from an iron lamp-post, 16 feet high, on Point della Madonna, and should be seen from a distance of 3 miles. The light is unwatched.

A *green fixed* light is exhibited, at 19 feet above high water, from an iron lamp-post, 16 feet high, on the south-western end of the quays at Rogoznica, and should be seen from a distance of 2 miles. The light shows *white* towards the village; it is unwatched.

Mulo islet.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white group occulting* light, showing a group of *two* eclipses of *one and a half seconds* each *every fifteen seconds* (light between eclipses, *three seconds;* between groups, *nine seconds*), is exhibited, at 77 feet above high water, from an octagonal stone tower, 58 feet high, with dwelling attached, on the summit of Mulo islet, and should be seen from a distance of 14 miles.

Page 192.—Spaun rock.—Buoy.—A white conical buoy, surmounted by a spherical cage, is moored on the northern side of Spaun rock.

Chart 2774, Grossa island to Zirona channel.

Svilan islet lies about a mile north-westward of Spaun rock; a shoal with 2¾ fathoms water lies off its south-eastern end.

CHAPTER VII.

Chart 2712, Zirona channel to Curzola.

Page 193.—S. Arcangelo islet.—The tower and ruins of a chapel are on the eastern slope of the islet.

Beacon.—A black triangular framework beacon, surmounted by a square, stands on the summit of S. Arcangelo islet.

Page 194.—Port S. Giorgio.—Light.—A *red fixed* light is exhibited, at 17 feet above high water, from an iron lamp-post, 17 feet high, on the quay in Port S. Giorgio, and should be seen from a distance of 4 miles. The light is unwatched.

LIGHT.—Murvica.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *red occulting* light *every five seconds* (eclipse, *one second*) is exhibited, at 48 feet above high water, from a square tower, 23 feet high, on the south side of a dwelling situated on the summit of Murvica islet, and should be seen from a distance of 9 miles.

Page 195.—LIGHT.—Galera.—*Cancel* paragraph, and *substitute*:—

Galera islet.—LIGHT.—A *white group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 37 feet

Page 195 continued. Chart 2712.

above high water, from a red conical iron turret with a gallery, 27 feet high, on the summit of Galera islet, which is situated about three-quarters of a mile east-south-eastward of Kluda, and should be seen from a distance of 11 miles. The light is unwatched.

Celini rock.—Light.—A *red flashing* light *every three seconds* is exhibited, at 49 feet above high water, from a red conical iron turret, with a gallery, 25 feet high, on the summit of Celini rock, and should be seen from a distance of 5 miles. The light is unwatched.

Bossiljina bay.—Lights.—A *red fixed* light is exhibited, at 25 feet above high water, from a red iron conical turret with a gallery, 25 feet high, on Bossiljina point, which is situated on the southern side of Bossiljina bay about three-quarters of a mile from the head, and should be seen from a distance of 3 miles.

A *green fixed* light is exhibited, at 16 feet above high water, from an iron lamp-post, 16 feet high, on the quay at Bossiljina, and should be seen from a distance of one mile.

These lights are unwatched.

Plan, Port Trau, on sheet 1612.

Soldan bay.—Shoal.—Shoal water of 2½ fathoms extends nearly a cable southward of Zubrian (Ciprian) point.

Page 196.—Trau channel.—The southern side of the channel, about 3 cables westward of the swing bridge, is marked by a buoy; the red beacon has been removed.

Lights.—*Cancel* first paragraph, and *substitute*:—

Lights.—A *red fixed* light is exhibited, at 22 feet above high water, from an iron support on a red house, 23 feet high, situated on the outer end of a pier extending 150 feet westward from Zubrian (Ciprian) point, and should be seen from a distance of 5 miles. The light is unwatched.

Chart 2712, Zirona channel to Curzola.

Page 197.—Galera islet.—Beacon.—*Cancel* second paragraph, and *substitute*:—

Scille rock.—Light.—A *white occulting* light is exhibited, at 18 feet above high water, from a red iron column, 20 feet high, in 9 feet water, on Scille rock, situated about 7½ cables eastward of Galera shoal beacon, and should be seen from a distance of 5 miles. The light is unwatched.

In the anchorage off Vranica village give a berth of 1½ cables to the rocks off the north shore.

Plan, Port Spalato, on sheet 1612.

Page 198.—PORT SPALATO.—Town.—The civil population of Spalato was about 13,000 in 1912.

Page 199.—Shipping.—In 1912, 5,443 steam vessels, of 1,593,208 tons, and 935 sailing vessels of 44,390 tons, entered the port of Spalato.

Page 199 continued. Plan on sheet 1612.

Telephone.—There is telephonic communication between Spalato and Trau, and there are call stations at the villages, Salona, Castel Susurac, Castel Vitturi (also a post and telegraph station), and Castel Vecchio.

LIGHTS.—Outer molehead.—Fog signal.—A hand fog horn at the outer molehead lighthouse gives a *short* blast followed by a *long* blast in answer to vessels' fog signals.

S. Pietro mole light shows *white* to the north-eastward.

Miovo mole.—A *green fixed* light is exhibited, at 22 feet above high water, from an iron lamp-post, 19 feet high, on the north, and from a similar post on the south, outer corner of Miovo (S. Doimo) mole. The lights should be seen from a distance of 3 miles; they are unwatched, and show *white* towards the mole.

Prohibited anchorage.—Anchorage is prohibited in Port Spalato north-westward of a line joining S. Stefano point and the north-western extreme of Veneto (the inner eastern) mole.

Salvage.—*Cancel* paragraph.

Page 200.—Coal and supplies.—About 18,000 tons of English coal are imported annually; the depôt is near the Miovo mole. Good water can be obtained from ten hydrants on the quays.

Chart 2712, Zirona channel to Curzola.

Page 201.—Karober cove.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *red fixed* light is exhibited, at 39 feet above high water, from an iron hut, 20 feet high, on Glavica point, and should be seen from a distance of 5 miles. The light is unwatched.

Stomoska (Stomorska) cove.—A *green fixed* light is exhibited, at 34 feet above high water, from an iron support on an iron hut, 26 feet high, on the western side of Stomoska cove, situated about 1¾ miles south-eastward of Port Sordo, and should be seen from a distance of 3 miles. The light is unwatched.

Telegraph.—There is a post and telegraph office at Stomoska.

SPALATO PASSAGE.—LIGHT.—A *white occulting* light *every ten seconds* (eclipse, *five seconds*) is exhibited, at 36 feet above high water, from a red iron tower, 34 feet high, on Livka point, the eastern extreme of Solta island, and should be seen from a distance of 10 miles. The light is unwatched. For the arc of visibility, *see* Light list.

Plan, Almissa road, on sheet 1612.

Page 203.—Lights.—*Cancel* section, and *substitute*:—

Lights.—A *fixed* light, showing *red* and *white* sectors, is exhibited, at 26 feet above high water, from an iron support, 15 feet high, in the piazza of the S. Francesco convent, on the eastern shore of

Page 203 continued. Plan on sheet 1612.

Almissa road, and should be seen from a distance of 3 miles. The light is unwatched. For the sectors of the light, *see* Light list and plan.

A *white fixed* light is exhibited at 20 feet above high water, from a green lamp-post, 17 feet high, on Almissa molehead, and should be seen from a distance of 2 miles. The light is unwatched, and may not be lit during northerly gales.

Mooring buoy.—A mooring buoy is placed 180 yards from the shore off Rad (Ratmali) village, about 9 cables southward of S. Francesco convent.

Plan, Port Makarska, on sheet 1612.

Page 204.—Lights.—The light on Makarska molehead is unwatched.

Mooring buoy.—There is a mooring buoy in Port Makarska.

Chart 2712, Zirona channel to Curzola.

Page 205.—Port Milna.—Lights.—*Cancel* section, and *substitute*:—

Lights.—A *red group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 26 feet above high water, from a square stone turret, 25 feet high, on Biaka point, and should be seen from a distance of 4 miles. The light is unwatched.

A *green fixed* light is exhibited, at 16 feet above high water, from a lamp-post, 13 feet high, on the quay in the inner harbour of Port Milna, and should be seen from a distance of 2 miles. The light, which is unwatched, shows *white* towards the land.

Port S. Pietro.—Light.—*Cancel* paragraph, and *substitute*:

Light.—A *green fixed* light is exhibited, at 23 feet above high water, from a red iron support on a hut, 19 feet high, on the head of the mole at Port S. Pietro, and should be seen from a distance of 4 miles. The light is unwatched.

Spliska cove.—Light.—A *white fixed* light is exhibited, at 23 feet above high water, from an iron lamp-post, 19 feet high, on the point on the eastern side of the entrance to Spliska cove, about 2¼ miles eastward of Port S. Pietro, and should be seen from a distance of 5 miles. The light is unwatched.

Pages 205, 206.—Port Pucisce.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *white fixed* light is exhibited, at 66 feet above high water, from a square tower on a dwelling, 38 feet high, 42 yards within S. Nicolo point, the western entrance point of Port Pucisce, and should be seen from a distance of 7 miles.

Page 206.—Bol.—Light.—The light on Bol mole should be seen from a distance of 5 miles.

Chart 2713, Curzola to Cattaro.

Page 207.—Podgora cove.—Buoy.—A buoy is placed in 17 fathoms water, about 75 yards off the molehead in Podgora cove, near Luka village, 3¾ miles south-eastward of Makarska.

Page 208.—Trappano.—The *white* light exhibited from Trappano mole should be seen from a distance of 2 miles, and the *red* light of one mile.

Plan, Approaches to Stagno Piccolo channel, on sheet 1582.

Cerkvice cove.—Light.—A *green fixed* light is exhibited, at 21 feet above high water, from a lamp-post, 17 feet high, on the head of the mole at Cerkvice cove, 5¼ miles south-eastward of Port Trappano, and should be seen from a distance of 2 miles. The light is unwatched.

Sreser shoal.—Beacon.—A stone obelisk, 16 feet high, and painted red and white in horizontal stripes, stands in 1½ fathoms water on Sreser shoal, which is situated nearly half a mile south-south-westward of Gojak islet.

Light.—Drace.—*Cancel* paragraph, and *substitute*:—

Drace.—A *fixed* light, showing *red* and *green* sectors, is exhibited, at 19 feet above high water, from a lamp-post, 17 feet high, on the head of the mole at Drace, on the west shore of Briesta bay; the *red* light should be seen from a distance of 3 miles, and the *green* of 2 miles. The light is unwatched, and cannot be lit during easterly gales. For the sectors of the light, *see* Light list and plan.

Chart 2713, Curzola to Cattaro.

Page 209.—Gradac light should be seen from a distance of 2 miles. It is unwatched.

Plan, Port Tolero, on chart 2713.

Port Tolero.—Beacon.—The group of stakes near the edge of the sands midway between Port Tolero and Narenta river entrance has been destroyed (1913).

Page 210.—Narenta river.—Lights.—The light exhibited from the south molehead shows *red* over the entrance channel, and *green* elsewhere.

Directions.—Steam vessels in the river must go at a slow speed to avoid damaging the dikes.

Metkovic.—There is a telephone station at Metkovic.

Plan, Approaches to Stagno Piccolo channel, on sheet 1582.

Page 211.—Klek bay.—Lights.—*Cancel* first paragraph, and *substitute*:—

Lights.—A *red group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 29 feet above high water,

Page 207.—Podgora cove.—Buoy.—A buoy is moored in 17 fathoms water, about 75 yards off the mouth of the Podgora cove near Lake village. It bears southeastward of Modrovska.

Page 208.—Trappano.—The white light exhibited from Trappano mole should be seen from a distance of 7 miles, and the red light at one mile.

Page 209 appears as Page 208 (page 208 is blank).

Gerkvice cove.—Light.—A green and red light is exhibited at 31 feet above high water, from a lamp, 17 feet high, on the head of the mole at Gerkvice cove, by radio communication of Fort Tajer, and should be seen from a distance of 3 miles. The figure is increased.

Brusor shoal.—Beacon.—A new beacon, in the form of a painted red and white or bordered white, post, 10 feet high, and marked Brusor shoal, which is situated approximately 1 mile south southwest of Tajer light.

Light.—Drace.—[illegible]

Drace.—A [illegible] shoaling and [illegible] 31 feet above high water, from a lamp, 17 feet high, [illegible] of the mole at Drace, on the [illegible] and light should be seen from a distance of [illegible] miles. The light is [illegible]. For the purpose of the light, the [illegible]

Page 210.—Grudne light should be seen from a distance of 3 miles. It is numbered.

Page 211 appears as Page 210.

Port Telaro.—Beacon.—The [illegible] Telaro and [illegible] shoals between Port Telaro and [illegible] the [illegible] beacon [illegible].

Page 210.—Nakanna river.—Light.—The [illegible] on the south pedestal [illegible] the [illegible] channel.

Directions.—[illegible]

Petrovac.—There is a telephone station at Petrovac.

Page 211 appears as Page 210 (page 210 is blank).

Page 211.—Ulcinj bay.—Lights.—[illegible]

Lights.—A [illegible] a [illegible] on the [illegible] 31 feet above high water.

Page 211 continued. Plan on sheet 1582.

from a tower, 27 feet high, attached to a hut, 12 yards within the south-eastern point of Montecuccoli rock, and should be seen from a distance of 5 miles. The light is unwatched.

Stagno Piccolo channel.—Lights.—A *white fixed* light is exhibited, at 30 feet above high water, from an iron post, 25 feet high, on Celjen point, on the southern side of the channel 1½ miles within Nedilja point, and should be seen from a distance of 4 miles.

A *green fixed* light is exhibited, at 21 feet above high water, from an iron post, 23 feet high, on Mirna point, on the eastern side of Hodilje boat harbour, and should be seen from a distance of 2 miles.

A *red fixed* light is exhibited, at 12 feet above high water, from a conical masonry beacon, 13 feet high, on Vranjak shoal, and should be seen from a distance of 3 miles.

A *red fixed* light is exhibited, at 20 feet above high water, from an iron post, 17 feet high, on Mali Vos point, on the north-eastern side of the channel opposite Stagno piccolo, and should be seen from a distance of 3 miles.

These lights are unwatched.

Page 212.—First paragraph: The beacon on Vranjak shoal is now a light-beacon. *See* page 211.

Directions.—After passing Celjen point light-post, steer towards Mirna point light-post, until Vranjak light-beacon and Mali Vos light-post are in line; then towards and past Vranjak light-beacon, and east-south-eastward until near the shore, when steer south-south-eastward.

Plan, Spalmadori channel, on sheet 1612.

Page 213.—Cape Pellegrino.—LIGHT.—A *white group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 69 feet above high water, from a red conical tower, with a gallery, 36 feet high, on the northern point of Cape Pellegrino, and should be seen from a distance of 12 miles. The light is unwatched.

Plan, Citta Vecchia bay, on sheet 1612.

CITTA VECCHIA BAY.—Light.—*Cancel* paragraph, and *substitute*:—

LIGHTS.—A *white occulting* light *every three seconds* (eclipse, *one second*), with a *red* sector, is exhibited, at 28 feet above high water, from a red pillar over a red cylindrical hut, 22 feet high, with two red gasometers attached, on Fortino point, and should be seen from a distance of 10 miles. The light is unwatched. For the *red* sector, *see* Light list.

A *green fixed* light is exhibited, at 19 feet above high water, from an iron post, 17 feet high, at the western end of the quay at Citta Vecchia; and should be seen from a distance of 2 miles. The light is unwatched.

(Page 211 continued. For the rest see Page 212.)

from a tower, 27 feet high, attached to a house, 12 yards within the south-eastern point of Montserrat rock, and should be seen from a distance of 5 miles. The light is a fixed red.

Stagno Piccolo channel.—Lights.—A white fixed light is exhibited, at 30 feet above high water, from an iron post, 22 feet high, on Cofjen point, on the southern side of the channel 1½ miles within Xedilja point, and should be seen from a distance of 4 miles.

A green fixed light is exhibited, at 21 feet above high water, from an iron post, 22 feet high, on Xiffre point, on the eastern side of Hodilje boat harbour, and should be seen from a distance of 2 miles.

A red fixed light is exhibited, at 12 feet above high water, from a conical masonry beacon, 12 feet high, on Vrapjak shoal, and should be seen from a distance of 3 miles.

A red fixed light is exhibited, at 20 feet above high water, from an iron post, 17 feet high, on Mali Vo point, on the north-eastern side of the channel opposite Stagno piccolo, and should be seen from a distance of 3 miles.

These lights are unwatched.

Page 212.—First passing in: The beacon on Vrapjak shoal is a light-beacon. See page 211.

Directions.—After passing Cofjen point light-post, steer towards Xiffre point light-post, until Vrapjak light-beacon and Mali Vo light-post are in line; then towards and pass Vrapjak light beacon, and then south-eastward until near the shore, when steer south-eastward.

(For the remainder of channel, see Page 213.)

(Page 212 continued. For the rest see Page 213.)

Page 213.—Cape Pellegrino.—LIGHT.—A white group flashing light, showing a group of two flashes every ten seconds, is exhibited, at 69 feet above high water, from a red conical tower, with a gallery, 36 feet high, on the northern point of Cape Pellegrino, and should be seen from a distance of 12 miles. The light is unwatched.

(See Cliffe Tunnelle bay, on Page 214.)

CITTA VECCHIA BAY.—Light.—[illegible] at [illegible] and [illegible].—

LIGHTS.—A white occulting light every five seconds, [illegible] with a red sector, is exhibited, at 32 feet above high water, from a red pillar over a red cylindrical hut, 22 feet high, with two red [illegible] attached, on Zerrino point, and should be seen from a distance of 10 miles. The light is unwatched. For the rest see Lights list.

A green fixed light is exhibited, at 12 feet above high water, from an iron post, 17 feet high, at the western end of the quay at Citta Vecchia, and should be seen from a distance of 2 miles. The light is unwatched.

Page 213 continued. Plan on sheet 1612.

Buoy.—A white buoy is moored in 1½ fathoms water on the northern edge of a shoal close westward of the quay.

Plan, Ports Verboska and Gelsa, on sheet 1612.

Port Verboska.—Lights.—A *green fixed* light is exhibited, at 18 feet above high water, from a red iron post, 14 feet high, on Croce point, about half a mile westward of Glavica point, and should be seen from a distance of 2 miles.

A *red fixed* light is exhibited, at 16 feet above high water, from a lamp-post, 15 feet high, on the eastern end of the quay at Verboska, and should be seen from a distance of one mile.

The lights are unwatched.

Page 214.—Port Gelsa.—Light.—A *green fixed* light is exhibited, at 17 feet above high water, from an iron standard, 15 feet high, on the south-eastern corner of the quay jetty in Port Gelsa. The light is unwatched.

Chart 2712, Zirona channel to Curzola.

S. Giorgio point.—LIGHTS.—*Cancel* first paragraph, and *substitute*:—

LIGHTS.—A *white occulting* light *every five seconds* (eclipse, *two seconds*) is exhibited, at 47 feet above high water, from a square stone tower, 45 feet high, with a dwelling near it, about 45 yards northward of S. Antonio chapel on S. Giorgio point, and should be seen from a distance of 12 miles. For the arc of visibility of the light, *see* Light list.

Page 215.—Torcola island.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHTS.—A *white occulting* light *every five seconds* (eclipse, *two seconds*), with a *red* sector, is exhibited, at 66 feet above high water, from a circular red hut with a gallery, 32 feet high, situated on the coast of Torcola island, 2½ cables south-eastward of Maestro point, the south-west extreme of the island; the *white* light should be seen from a distance of 12 miles, and the *red* light of 8 miles. The light is unwatched. For the *red* sector, which shows over Lukavci rocks, *see* Light list and chart.

A *green fixed* light is exhibited, at 23 feet above high water, from a lamp-post, 10 feet high, on the eastern side of the entrance to Porto Grande, and should be seen from a distance of 2 miles. The light is unwatched, and shows *white* over the port. For the arc of visibility, *see* Light list.

Plan, Spalmadori channel, on sheet 1612.

PORT LESINA.—Lights.—*Cancel* section, and *substitute*:

Lights.—A *green occulting* light *every five seconds* (eclipse, *one second*) is exhibited, at 36 feet above high water, from a white stone

Page 215 continued. Plan on sheet 1612.

tower, 28 feet high, on the south-west coast of Galisnik islet, and should be seen from a distance of 7 miles.

A *red fixed* light is exhibited, at 19 feet above high water, from a lamp-post, 17 feet high, on the south end of the quays on the eastern side of Port Lesina, and should be seen from a distance of one mile; it shows *white* towards the inner part of the port.

The lights are unwatched.

Page 217.—Directions.—Steam vessels leaving Port Lesina must not pass through the channel eastward of Galisnik islet.

Chart 2712, Zirona channel to Curzola.

Page 220.—Shipping.—In 1912, 2,001 steam vessels, of 281,524 tons, and 91 sailing vessels of 3,254 tons, entered Port S. Giorgio (Lissa).

COMISA BAY.—Light.—The light at the head of the breakwater is unwatched.

The breakwater in Comisa harbour is being extended, and a *white fixed* light is shown at the end of the works.

Tides.—It is high water, full and change, in Comisa bay, at IIIh. 55m.; springs rise 6 inches.

CHAPTER VIII.

Chart 2713, Curzola to Cattaro.

Page 225. — Giuliana bay. — Alessandria islet. — LIGHT.—A *white flashing* light *every six seconds* (flash, *one second*) is exhibited, at 112 feet above high water, from a grey tower, 45 feet high, on the western point of Alessandria islet, and should be seen from a distance of 16 miles. The light is unwatched.

Port Terstenik.—There is only one mooring buoy off the mole.

Chart 2712, Zirona channel to Curzola.

Port Racisce.—A mooring buoy is placed in 4½ fathoms water off the molehead.

Plan, Sabbioncello channel, on sheet 1611.

Page 227.—Port Lombardo (Lombarda).—Light.—A *red fixed* light is exhibited, at 17 feet above high water, from a lamp-post, 18 feet high, on the head of the mole at Port Lombardo, on the north-east coast of Curzola island, about 1¼ miles westward of Cape Speo, and should be seen from a distance of 3 miles. The light is unwatched.

The signal station on the north-western Sestrice island is discontinued.

Chart 2712, Zirona channel to Curzola.

Page 228.—Proisd island.—LIGHT.—A *white flashing* light *every three seconds* is exhibited, at 38 feet above high water, from a hexagonal tower, 26 feet high, on Proisd point, the western extreme of Proisd island, and should be seen from a distance of 11 miles. The light is unwatched. For the arc of visibility, *see* Light list and chart.

Plan, Grande bay, on sheet 1611.

Page 229.—Grande (Vallegrande) bay.—Mooring buoy.—A mooring buoy is placed, in 3½ fathoms water, off the quay at Valle Grande.

LIGHT.—On Vranac point.—*Cancel* paragraph, and *substitute*:—

Lights.—Kamenjak islet.—A *red group flashing* light, showing a group of *two* flashes *every six seconds*, is exhibited, at 32 feet above high water, from a hexagonal tower, 23 feet high, on the southern side of Kamenjak islet, situated about one mile north-westward of Ossiak islet, and should be seen from a distance of 5 miles. For the arc of visibility, *see* Light list and plan.

Vranac point.—A *red fixed* light is exhibited, at 24 feet above high water, from an iron crane with hut, 19 feet high, on Vranac point, and should be seen from a distance of 4 miles.

Valle Grande.—Quay.—A *green fixed* light is exhibited, at 19 feet above high water, from an iron post, 18 feet high, on the western end of Valle Grande quay, and should be seen from a distance of 2 miles. The light shows *white* towards the town.

These lights are unwatched.

Plan, Ports Carboni, Tre Pozzi, and Berna, on sheet 1611.

Page 231.—Port Berna.—Light.—A *red fixed* light is exhibited, at 19 feet above high water, from an iron post, 15 feet high, on Mali Zaglav point, and should be seen from a distance of 3 miles. The light is unwatched, and is unreliable during south-easterly gales.

Chart 2712, Zirona channel to Curzola.

CAZZA ISLET.—LIGHT.—The light on Gradisca point is a *white fixed* and *flashing* light *every six seconds* (flash, *four seconds*).

Page 232.—Markiara islet.—Rock.—A rock, about 100 yards in extent, with 5¾ fathoms water, and 15 fathoms close around, lies one mile S.S.W. ½ W. from Pod Markiara islet.

Page 233.—Lagosta.—Light.—A *red fixed* light is exhibited, at 23 feet above high water, from a green iron support on a hut, 23 feet high, on the end of the mole at S. Michele, Lagosta, and should be seen from a distance of 4 miles. The light is unwatched.

Page 234.—LIGHT.—The light on Skrigeva point should be seen from a distance of 26 miles.

[illegible] Zirone [illegible] to [illegible].

Page 228.—Proisd island.—LIGHT.—A [illegible] every three seconds is exhibited, at 33 feet above high water, from a [illegible] tower, 38 feet high, on Proisd rocks, the western extreme of Proisd island, and should be seen from a distance of 11 miles. The light is unwatched. The [illegible] are of visibility, see Lights [illegible] chart.

[illegible] Grande bay, see chart [illegible].

Page 229.—Grande (Vallegrande) bay.—Mooring buoy.—A mooring buoy is placed, in 3½ fathoms water, at the entry of Valle Grande.

LIGHT.—On Vrano point.—[illegible] [illegible] [illegible] —

Lights.—Kamenjak islet.—A red [illegible] light is exhibited from a group of two blades, every 20 seconds, is exhibited, at 30 feet above high water, from a lattice tower, 32 feet high, on the southern side of Kamenjak islet, situated about one mile northwest of Oselak isle, and should be seen from a distance of 8 miles. For the arc of visibility, see Lights list and plan.

Vrano point.—A red fixed light is exhibited, at 22 feet above high water, from an iron crane with [illegible], 18 feet high, on Vrano point, and should be seen from a distance of 7 miles.

Valle Grande.—Quay.—A green fixed light is exhibited, at 19 feet above high water, from an iron post, 16 feet high, on the western end of Valle Grande quay, and should be seen from a distance of 2 miles. The light above [illegible] towards the [illegible]

These lights are unwatched.

[illegible] (Lubiana, Ve [illegible] and [illegible] [illegible]).

Page 230.—Port Bernia.—Light.—A red fixed light is exhibited, at 15 feet above high water, from an iron post, 15 feet high, on Zaglav point, and should be seen from a distance of 3 miles. The light is unwatched, and is unreliable during [illegible].

[illegible] Zirone [illegible] to [illegible].

CANNA ISLET.—LIGHT.—The light on [illegible] point is a white fixed and flashing light every six seconds (flash, one second), [illegible]

Page 232.—Marikiara islet.—Rock.—A rock, about [illegible] in extent, with 1½ fathoms water, and 15 fathoms close [illegible], lies one mile S.S.W. ½ W. from Pel Marikiara islet.

Page 233.—Lagosta.—Light.—A red fixed light is exhibited, at 23 feet above high water, from a green iron support on a box, 22 feet high, on the end of the mole at S. Michele, Lagosta, and should be seen from a distance of 4 miles. The light is unwatched.

Page 234.—LIGHT.—The light on [illegible] point should be seen from a distance of 10 miles.

Chart 2713, Curzola to Cattaro.

Page 235.—Glavat islet.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating group occulting* light *every two* minutes, showing thus:—*white fixed, one minute; red occulting* with *ten* eclipses of *three seconds* each, *one minute*, is exhibited, at 149 feet above high water, from an octagonal stone tower on a dwelling, 84 feet high, on the summit of Glavat islet; the *white* light should be seen from a distance of 16 miles, and the *red* of 13 miles. For the arc of visibility, *see* Light list.

Plan, Port Palazzo, on chart 2713.

Page 237.—Kula rock.—Light.—A *red occulting* light is exhibited, at 28 feet above high water, from a red iron post, 13 feet high, on Kula rock, and should be seen from a distance of 4 miles. The light is unwatched.

Chart 2713, Curzola to Cattaro.

PORT MEZZO MELEDA.—Lights.—*Cancel* section, and *substitute*:—

Light.—A *white fixed* light is exhibited, at 43 feet above high water, from a red iron post, 30 feet high, on Pusta point, and should be seen from a distance of 7 miles. The light is unwatched. For the arc of visibility, *see* Light list and chart.

Page 240.—Light.—The light on the landing pier in Luka cove should be seen from a distance of 3 miles.

Mezzo.—Telegraph.—There is a telegraph office in Mezzo village.

Page 241.—S. Andrea islet.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light *every five seconds*, showing thus:—*white* fixed, *four seconds; white* flash, *one second; white* fixed, *four seconds; red* flash, *one second*, is exhibited, at 226 feet above high water, from a stone lighthouse, 57 feet high, on the summit of S. Andrea (Donzella) islet; the *white* flashes should be seen from a distance of 16 miles, the *red* flashes of 12 miles, and the *white fixed* light of 10 miles.

Page 242.—Great Stagno channel.—Lights.—A *white fixed* light is exhibited, at 13 feet above high water, from a pyramidal-shaped group of piles, 15 feet high, $3\frac{1}{4}$ cables west-north-westward of Brace (Broce), and should be seen from a distance of 2 miles.

A *red fixed* light is exhibited, at 13 feet above high water, from a pyramidal-shaped group of piles, 15 feet high, about $3\frac{8}{10}$ cables north-westward of the preceding light, and should be seen from a distance of one mile.

Page 242 continued. Chart 2713.

These lights mark the western part of a line of wood posts; they are unwatched.

The colour of the light on Stagno molehead is *green.*

Plan, Port Slano, on chart 2713.

Port Slano.—Light.—*Cancel* arc of visibility.

Chart 2713, Curzola to Cattaro.

Page 243.—Cannosa.—Light.—A *red fixed* light is exhibited, at 21 feet above high water, from a red cylindrical house with post and red platform, 18 feet high, on the inner end of Cannosa mole, Serdupina cove, and should be seen from a distance of 5 miles. The light is unwatched, and cannot be lit during south-westerly gales.

Plan 3675, Port Gravosa and Ombla inlet.

Page 245.—PORT GRAVOSA.—Buoys and beacons.—*Cancel* second paragraph of section, and *substitute*:—

There are two mooring buoys in the port for small steam vessels.

Lights.—*Cancel* section, and *substitute*:—

Lights.—Two *green fixed* lights, placed vertically, at 25 and 19 feet above high water, are exhibited from a green iron support on a house, 23 feet high, on Cantafico point, and should be seen from a distance of 2 miles.

A *red fixed* light is exhibited, at 22 feet above high water, from an iron standard on a stone pedestal, 17 feet high, on the head of the mole southward of Sta. Croce convent, and should be seen from a distance of 3 miles.

The lights are unwatched.

Telephone.—There is a telephone station at Gravosa.

Shipping.—In 1912, 1,854 steam vessels, of 896,721 tons, and 282 sailing vessels, of 20,920 tons, entered the port of Gravosa.

Page 246.—Gujiliste bank, about 50 yards in extent, with 5 fathoms water, and 7 to 14 fathoms around, lies about a cable north-westward of Gujiliste or Lapad point.

Plan, Ports of Ragusa, on sheet 1582.

RAGUSA.—The civil population of Ragusa, including Gravosa, was 10,000 in 1912.

Telephone.—There is a telephone station at Ragusa.

Shipping.—In 1912, 1,072 steam vessels, of 189,126 tons, and 120 sailing vessels of 3,411 tons, entered the port of Ragusa.

Lights.—*Cancel* section, and *substitute*:—

Lights.—*A red fixed* light is exhibited, at 25 feet above high water, from a green lamp-post, 17 feet high, on the molehead at Port Cassone, and should be seen from a distance of 3 miles.

Page 246 continued. Plan on sheet 1582.

The light is masked by Lacroma island from the south-south-eastward, and it is unreliable in heavy weather.

A *white fixed* light, with a *green* sector, is exhibited at 17 feet above high water, from a green lamp-post, 13 feet high, on Pescaria mole-head; the *white* light should be seen from a distance of 2 miles, and the *green* light of one mile. For the sector of the light, *see* Light list.

The lights are unwatched.

Tides.—It is high water, full and change, at Ragusa, at IIIh. 47m.; springs rise 9 inches, neaps 6 inches.

Chart 2713, Curzola to Cattaro.

Page 247.—Kupari.—Mooring buoy.—A mooring buoy lies off Kupari village.

Plan, Ports of Ragusa Vecchia, on sheet 1582.

Page 248.—Ragusa Vecchia.—Buoy.—The white spar buoy marking the shoal with 1¼ fathoms water, is moored on its northern side.

Plan, Little Port Molonta, on sheet 1463.

Page 249.—Molonta islet.—A reef extends half a cable off the east coast of Molonta islet, and reefs surround the large rock north-eastward of the islet.

Light.—The light exhibited from the north-eastern side of Little Port Molonta entrance should be seen from a distance of 3 miles. It is unwatched, and is unreliable during north-easterly gales.

CHAPTER IX.

Chart 2701, Gulf of Cattaro to Corfu.

Page 250.—Albanian coast.—Depths.—Less water has been found (1913) on the coast of Albania than is shown on the charts; when navigating in this locality, especially off the mouths of rivers, caution should be used.

Plan 1463, Approaches to Cattaro.

Page 251.—LIGHTS.—Point d'Ostro.—*Cancel* section, and *substitute*:—

LIGHTS.—Point d'Ostro.—A *white fixed* and *flashing* light *every twenty seconds* (flash, *six seconds*) is exhibited, at 263 feet above high water, from a tower, with a white lantern, 55 feet high, adjoining a two-storied dwelling, on the summit of Point d'Ostro; the *flash* should be seen from a distance of 23 miles, and the *fixed* light of 17 miles.

Rondoni islet.—A *red fixed* light is exhibited, at 113 feet above high water, from a red stone turret, with a gallery, 14 feet high, in

Page 245 continued. From page 244.

The light is marked by Inscoma Island from the south-eastward, and it is unreliable in heavy weather.

A white and red light, with a green sector, is exhibited at 17 feet above high water, from a green lamp post, 12 feet high, on Pescadia island; the white light should be seen from a distance of 9 miles, and the green light of one mile. For the sector of the light, see Lights list.

The lights are unmanned.

Tides.—It is high water, full and change, at Dagoes, at 11h. 45m.; springs rise 9 feet, neaps 6 feet.

Page 246, Corrals to Cotonu.

Page 247.—Kupari.—Mooring buoy.—A mooring buoy lies off Kupari village.

Page, Port of Dagoes, Pendik to Sarajevo.

Page 248.—Dagoes Vecchia.—Buoy.—The white spar buoy marking the shoal which at harbour entrance is moored on its northern side.

Page, Port of Dagoes, Sarajevo to Cotonu.

Page 249.—Molonia Islet.—A low sandy islet, south of the east coast of Molonia Islet, and near northward the large rock northward of the islet.

Night.—The light exhibited from the north-eastern side of Little Port Molonia entrance should be seen from a distance of 3 miles. It is unmanned, and is unreliable during north-easterly gales.

CHAPTER IX.

Page, Cotonu, Corfu to Cotonu.

Page 180.—Albanian coast.—Depths.—Low water has been found (1894) on the coast of Albania than is shown on the charts; when navigating in this locality, especially at the months of storm, caution should be used.

Page 181, Approaches to Cotonu.

Page 181.—LIGHTS.—Point d'Otro.—Change sectors, and substitute—

LIGHTS.—Point d'Otro.—A white fixed and flashing light every twenty seconds (flash, six seconds) is exhibited, at 203 feet above high water, from a tower, with a white lantern, 35 feet high, adjoining a two-storied dwelling, on the summit of Point d'Otro; the flash should be seen from a distance of 23 miles, and the fixed light of 17 miles.

Roundom Islet.—A red fixed light is exhibited at 18 feet above high water, from a red stone tower, with a gallery, 12 feet high, in

Page 251 continued. Plan 1463.

Fort Mamula, on the summit of Rondoni islet, situated in the entrance to the Gulf of Cattàro, and should be seen from a distance of 5 miles. The light is unwatched.

Mooring buoy.—There is a mooring buoy about 2 cables north-eastward of Rondoni islet.

Plan, Meljine bay and Kumbor channel, on sheet 419.

Page 252.—Prohibited anchorages.—*Cancel* paragraph (*b*) and *substitute*:—

(*b*) In Kumbor channel in the area included between lines drawn S. 7° W. from Kumbor pier, and from Banic chapel.

Castelnuovo.—Light.—The light exhibited from Castelnuovo South molehead should be seen from a distance of 3 miles. It is unwatched, and is unreliable during southerly gales.

Wireless telegraph.—There is a wireless telegraph station at Castelnuovo open to the public at all times. The call letters are O.H.C.

Telephone.—There is a telephone station at Castelnuovo.

Meljine bay.—There are three mooring buoys in Meljine bay.

Lights.—The *green fixed* light at Meljine should be seen from a distance of 2 miles; it is unwatched.

The *red fixed* lights at Zelenica (Zelenika) are unwatched, and are unreliable during north-easterly gales. *Cancel* "During strong south-easterly winds these lights cannot be shown."

Tides.—It is high water, full and change, at Meljine, at IIIh. 38m.; springs rise 9 inches, neaps 6 inches.

Page 254.—Beacon.—Light.—The beacon on Gjenovic shoal is a conical iron beacon, 17 feet high.

Cancel second paragraph and *substitute*:—

A *red fixed* light is exhibited, at 13 feet above high water, from the beacon, and should be seen from a distance of 5 miles. The light is unwatched. For the arc of visibility, *see* Light list and plan.

Plan, Teodo bay, on sheet 419.

Page 255.—Teodo.—Telephone.—There is a telephone station at Teodo.

Plan, Le Catene channel, on sheet 419.

CATENE CHANNEL.—Lights.—*Cancel* third paragraph, and *substitute*:—

A *white group flashing* light, showing a group of *two* flashes *every three seconds*, is exhibited, at 28 feet above high water, from a red conical iron turret, 26 feet high, on Turka point, and should be seen from a distance of 8 miles. The light is unwatched.

[illegible] 327 [illegible].

Fort Nimrod, on the summit of Jordanfield.—Located in the [illegible] to the Gulf of Cutaro, and should be seen from a distance of [illegible]. The light is unwatched.

Mooring buoy.—There is a mooring buoy about 2 cables [illegible] eastward of Jordan Islet.

[illegible] Mahjee Island and Kimber channel, on chart [illegible].

Page 252.—Prohibited anchorages.—[illegible] paragraph (b) and substitute:—

(b) In Kimber channel in the area bounded between Tree Island [illegible] 2° W. from Kimber pier and from Jimie dropped.

Castelnuovo.—Light.—The light established from Castelnuovo south-eastward should be seen from a distance of 3 miles. It is unwatched, and is unreliable during southerly gales.

Wireless telegraph.—There is a wireless telegraph station in Castelnuovo open to the public at all times. The call letters are [illegible].

Telephone.—There is a telephone station at [illegible].

Melline bay.—There are three mooring buoys in Melline bay.

Lights.—The green range light at Melline should be seen from a distance of 3 miles; it is unwatched.

The red range light at Melline (Melline) is unwatched, and is unreliable during north-easterly gales. [illegible] easterly winds these lights cannot be shown.

Tides.—It is high water, full and change at Melline at 11h. 30m.; springs rise 3 feet, neaps 2 feet.

Page 254.—Beacon.—Light.—The [illegible] is a [illegible] iron beacon. It has [illegible]

[illegible] second paragraph, [illegible]:—

A red fixed light is established, at 12 feet above high water, from the beacon, and should be seen from a distance of 3 miles. The light is unwatched. For the use of visitors, see Light list [illegible].

[illegible] Tuolo bay, on chart [illegible].

Page 255.—Tuolo.—Telephone.—There is a telephone station at Tuolo.

[illegible] Cutaro channel, on chart [illegible].

CATTRIN CHANNEL.—Lights.—[illegible] third paragraph, and substitute:—

A white group flashing light, showing a group of two flashes every [illegible] seconds, is established, at 25 feet above high water, from a red conical iron tower, 32 feet high, on Tuna point, and should be seen from a distance of 4 miles. The light is unwatched.

Plan 1463, Port Molonta to Malaluka bay.

Page 256.—Risano.—Telephone.—There is a telephone station at Risano.

Lights.—Risano.—*Cancel* paragraph, and *substitute*:—

A *red fixed* light is exhibited, at 19 feet above high water, from a lamp-post, 16 feet high, on Risano molehead, and should be seen from a distance of 3 miles. The light shows *white* towards the land, and is unwatched.

Plan, Cattaro harbour, on sheet 419.

Cattaro.—The civil population of Cattaro was 4,000 in 1912.

Page 257.—Telephone.—There is a telephone station at Cattaro.

Harbour works.—*Cancel* paragraph.

Lights.—Cattaro.—*Cancel* third paragraph of section, and *substitute*:—

A *red fixed* light is exhibited at 21 feet above high water, from an iron standard on the north-western end of the quay at Cattaro, and should be seen from a distance of 3 miles. The light shows *white* towards the land, and is unwatched.

Plan, Port Budua, on sheet 1463.

Page 260.—Budua mole.—The light exhibited from Budua molehead should be seen from a distance of 3 miles; it is unwatched.

Plan 1463, Port Molonta to Malaluka bay.

S. Domenica.—Anchorage can be obtained north-westward of S. Domenica rock, with Lastua castle bearing N.E., distant a quarter of a mile.

Plan, Antivari roads, on sheet 1463.

Page 261.—Lights.—*Cancel* second and third paragraphs of section, and *substitute*:—

A *green fixed* light is exhibited at the end of the mole at Pristane; it is of very small power.

Wireless telegraph.—The wireless telegraph station is situated above the lighthouse on Volovica point; it has two masts.

Chart 2701, Gulf of Cattaro to Corfu.

Page 262.—LIGHT.—The light exhibited on Menders point is unwatched and unreliable.

Dulcigno.—Light.—A *green* light is exhibited, at 56 feet above high water, from the old fort on the coast at Dulcigno, and should be seen from a distance of 2 miles.

Landing can nearly always be effected at the mouth of the small river close eastward of Derana point, 1¾ miles south-eastward of Fort Dulcigno, whence Scutari can be reached by road.

Chart 2701, Gulf of Cattaro to Corfu.

Page 263.—BOJANA RIVER.—Bar.—The south-eastern entrance in June, 1914, was the deeper, and there was then a depth of about 4½ feet on the bar. The seaward side of the bar is very steep, the depth decreasing from 5 fathoms to one fathom in about half a cable. Within the river it deepens gradually to 7 feet and more. The least water is on a narrow ridge about 50 yards across. The passage across the bar is marked by stakes (branches with a tuft of twigs or leaves at the top); there is always one in position and sometimes more, but there is no rule on which side to leave them.

The bar often breaks from a swell when it is practically calm at the anchorage, and a comparatively light local wind (force about 4) from seaward will quickly raise a surf. The sea on the bar rose very quickly and with little warning in June, 1914. A southerly wind increases the depth on the bar, but at the same time raises a sea.

The rise of the tide is about one foot, and the state of the tide influences the conditions on the bar considerably. There is good anchorage inside the bar anywhere seaward of Pulej in from 8 to 15 feet water, sand and mud.

There is a small boat channel, with about 1½ feet water, to the eastward of the main channel over the bar, and the pilot states that a small boat can often get out this way, when the main channel is impassable; a pilot is necessary.

The river steamers can often pass the bar, when it is impracticable for boats, as they are made to take the ground, and, with their comparatively high sides, are not affected by breakers which would be dangerous for boats.

If it should be required to communicate with Scutari from the sea by river, much time might be saved by hiring one of these steamers as the possibility of delay from boats being inside and unable to come out is reduced.

The river.—The general depth in the channel of the river is over 8 feet (June, 1914), and the river presents no difficulty in navigating, as the probable position of the banks can, usually, be easily seen. A pilot is necessary for a stranger.

In the bends at Luargi and at Biela there are strong tide rips, and care is necessary in steering.

Several vessels were sunk in the river during the late war. There is a wreck below S. Giorgio, and several at the bend below Gorico hill; these must be avoided. In the reach above Gorico there are large shoals along the starboard side (going north-eastward), while about half-way along the reach there is a shallow (bar) which the pilot states has 3 feet water at low river; it had 5 feet in June, 1914. Above

Page 293.—POLANIA RIVER.—[illegible] entrance in June, 1904, was the depth and there was then a depth of about 41 feet on the bar. The usual depth of the bar is very steep, the depth decreasing from 3 fathoms to one fathom in about half a cable. With the river in flood, [illegible] 7 feet [illegible] over. The best water is on a narrow ridge about 50 yards outside [illegible] passage across the bar is marked by stakes [illegible] with the tops of trees or leaves at the top; there is a beacon on the [illegible] but there is no [illegible] on which [illegible].

The bar after heavy [illegible] is probably [illegible] the anchorage and a comparatively light load [illegible] [illegible] seaward with quickly rising sun. The [illegible] the bar [illegible] quickly and with little warning in June, 1904. A [illegible] increase the depth on the bar, but at the same time [illegible].

The rise of the tide is [illegible] and the [illegible] indicates the conditions on the bar [illegible]. There is good anchorage inside the bar [illegible] in from 5 to 10 feet water, sand and mud.

There is a small boat channel with about 11 [illegible] the south side of the main channel [illegible] small boat can enter yet, but this may [illegible] is possible a pilot is necessary.

The river steamers can [illegible] the bar, but [illegible] for boats, as they are unable to take the ground, and, with their comparatively high sides, are not affected by [illegible] which would be dangerous for boats.

If it should be required to [illegible] with vessel from the sea by river, such time might be saved [illegible] the [illegible] of delay [illegible] out [illegible].

The river.—The general depth in the channel of the river is over 8 feet during [illegible], and the river presents no difficulty in navigating to the probable position of the [illegible] usually [illegible]. A pilot is necessary for a stranger.

In the bends at [illegible] and at [illegible] are strong [illegible], and care is necessary in steering.

Several vessels were seen in the river during the [illegible]. There is a weak [illegible] and several at the head [illegible] (Corio hill); these must be avoided. In the reach above [illegible] there are large stacks along the starboard side (going northwards) with [illegible] lightering along the reach there is a [illegible] which the pilot states has 3 feet water at low water; it had 5 feet in June, 1904. Above

Page 263 continued. Chart 2701.

Oboti navigation of the river becomes more difficult, and just below Daragathe is a crossing with about 4½ feet water (June).

Where the Drinassa river runs into the Bojana there are considerable mud banks and islets covered with reeds and bushes; care is necessary here, particularly if towing boats, as the crossing is shallow (5 feet in June), and the current is very strong and sets across the channel, so that if caution is not used, the last boat of the tow may be thrown on the bank. Abreast the citadel the north-west bank is a cliff just at a turn; the current sets directly on to this cliff and forms a strong race, which also requires attention in steering.

Immediately above this two lines of stakes indicate the channel which then leads between two reed-covered islets. There are two sets of stakes, one on each side of the river; those on the eastern side are the ones to pass between.

There is anchorage either above or below the bridge, above it being the better as there is less current; steamboats' funnels and ensign staffs must be taken down to pass under the bridge, but for vessels that cannot go under one section is made to draw.

The pilot boat towing launch, two cutters, and a whaler, all laden, ascended the river in 7 hours, and returned in about 2½ hours.

The current was estimated at 2 knots in the lower reaches of the river, 3 knots at Oboti, and 4 knots just below Scutari. With a higher river the rate would be greater, and the pilot stated that it attains about 6 knots.

Pilots can be obtained at Pulej, or through the Harbour master at Port San Giovanni di Medua. The pilot for the mouth of the river lives at Pulej, and comes out to vessels; he was found to be trustworthy; the river pilots depend on this man for crossing the bar.

Pulej is a village of about a dozen houses, painted white, with red roofs.

An Albanian official, who acts as Health officer and generally as Captain of the Port, lives here.

The Roman Catholic church is a large white building on a small hill above the village.

There is a small pier abreast the Port office, with 5 feet water alongside its head.

San Nicolo village, on the west bank, is small, with a Greek church; a Montenegrin Health officer lives here.

San Giorgio.—A small tributary, the outlet from Lake Schass, joins the river at San Giorgio; at the junction is a corn mill with a tall chimney.

The hill at Luargi is a rocky knoll with scrub on the side.

[illegible] continued [illegible].

Other navigation of the river becomes more difficult, and just below Baraqatha is a crossing with about [illegible] feet water.

Where the Dhimasa river runs into the Indus, there are considerable sand banks and islands covered with reeds. The channel here is necessary here particularly if towing boats, as the current is strong, 5 to 6 feet in June, and the current is very strong and [illegible] so that if contrary [illegible] the last boat [illegible] be thrown on the banks. Above the [illegible] is a cliff but at a turn the current [illegible] a strong race, which also requires attention in towing.

Immediately above this are the two lines of stake [illegible] which then leads between two [illegible] stakes, one on each side of the river; the [illegible] the ones to pass between.

There is another [illegible] the better as there is [illegible] stakes must be taken down to pass under the bridge, but [illegible] that cannot go under [illegible] is made to [illegible].

The pilot boat towing [illegible] ascended the river in 7 hours [illegible] 2½ hours.

The current was estimated at 2 knots in the [illegible] river, 3 knots at Obeli, and 4 knots just below [illegible] river the rate would be greater, and the pilot stated [illegible] about 6 knots.

Pilots can be obtained at Pulej, or through the Harbour Master at Port San Giovanni di Medua. The pilot for the mouth of the river lives at Pulej, and comes out to vessels; he was found to be trustworthy; the river pilots depend on this man for crossing the bar.

Pulej is a village of about a dozen houses, painted white, with red roofs.

An Albanian official, who acts as Health officer and generally as Captain of the Port, lives here.

The Roman Catholic church is a large white building on a steep hill above the village.

There is a small pier abreast the Port office, with 5 feet water alongside its head.

San Nicolo village, on the west bank, is small, with a Greek church; a Montenegrin Health officer lives here.

San Giorgio.—A small tributary, the outlet from Lake Scutari, joins the river at San Giorgio; at the junction is a corn mill with a tall chimney.

The hill at Juraqi is a rocky knoll with scrub on the side.

Page 263 continued. Chart 2701.

Biela.—The hills on the south bank below, and on the west bank above Biela, are steep and rocky. There is very little cultivation below Biela, but a fair amount above it.

Oboti consists of a barracks, about eight stone houses, and some thatched cottages. Steamers frequently cannot get above this, and hulks are moored here for the river steamers to lie alongside and discharge their cargoes.

Two or three flat-bottomed lighters (about 60 feet by 15 feet) are kept here to take cargo to Scutari from vessels unable to proceed above this village.

SCUTARI.—The bridge over the Drinassa river has broken down. The water in the river on leaving Scutari lake was found suitable for use in steamboats' boilers.

Population.—The population of Scutari was about 37,000 in 1911.

Communication.—The telegraph lines were destroyed in the late war. A native messenger can be sent on horseback from San Nicolo to Scutari, and takes about five hours for the journey.

The Austrian and Italian steamers between them maintain almost a daily service.

Supplies.—A limited supply of native bread can be obtained at about 5d. a lb.; this bread, which is dried, is dipped into water before eating and is quite good. Small quantities of eggs and poultry can also be procured.

Bojana anchorage.—In approaching the anchorage off the mouth of the river, Pulej shows very clearly with the large white church just inside it. The 102-foot hill near San Nicolo is noticeable as it rises above the surrounding trees, and is covered with bushes and large bare patches of red earth, the latter being conspicuous. The 82-foot hill near Pulej is not noticeable.

Anchorage has been obtained in 12 fathoms, mud and good holding ground, with Pulej bearing N. ½ W., distant 3 miles.

Plan, San Giovanni di Medua, on 1463.

Page 264.—PORT SAN GIOVANNI DI MEDUA.—There is a patch above water near the eastern edge of the shallow bank projecting eastward from San Giovanni point.

Two beacons mark the edge of the bank:—A staff, painted red and white in horizontal stripes and surmounted by a globe, on the eastern edge of the bank near the dry patch; at night a *red fixed* light is shown at about 3 feet above high water, from this beacon, and should be seen from a distance of about one mile.

A staff, surmounted by a triangle, marks the northern side of the bank.

Page 79.—Continued. (Map 79).

Biela.—The hills on the south bank below, and on the west bank above Biela, are steep and rocky. There is very little cultivation below Biela, but a fair amount above it.

Obotti consists of a barracks, about eight store houses, and some hundred cottages. Steamers frequently cannot get across this, and boats are moored here for the river steamers to lie alongside and discharge their cargo.

Two or three flat-bottomed lighters (about 60 feet by 12 feet) are kept here to take cargo to Sestati from vessels unable to proceed above this village.

SCUTARI.—The bridge over the Ibbaesa River has broken down. The water in the river on leaving Sestati lake was found suitable for use in steamboat boilers.

Population.—The population of Sestati was about 8,000 in 1901.

Communication.—The telegraph lines were destroyed in the late war. A native messenger can be sent on horseback from San Nicola to Sestati, and takes about five hours for the journey.

The Austrian and Italian steamers between them visit it about every fortnight.

Supplies.—A limited supply of native bread can be obtained at about 5d. a lb.; this bread, which is dried, is dipped into water before eating and is quite good. Small quantities of eggs and poultry can also be procured.

Bojana anchorage.—In approaching the anchorage at the mouth of the river, Pulej shows very clearly with the large white church just inside it. The 300-foot hill near San Nicola is noticeable as it rises above the surrounding trees, and is covered with bush and large bare patches of red earth, the latter being conspicuous. The 52-foot hill near Pulej is not noticeable.

Anchorage has been obtained in 12 fathoms, mud and good holding ground, with Pulej bearing N. ¼ W., distant 2 miles.

Page 80.—Continued on Map 80.

Page 80.—PORT SAN GIOVANNI DI MEDUA.—

There is a patch above water near the eastern edge of the Italian bank projecting eastward from San Giovanni point.

Two beacons mark the edge of the bank.—A stake, painted red and white in horizontal stripes and surmounted by a globe, on the eastern edge of the bank near the dry patch; at night a red fixed light is shown at about 3 feet above high water, from this beacon, and should be seen from a distance of about one mile.

A stake, surmounted by a triangle, marks the northern side of the bank.

Page 264 continued. Plan on 1463.

A beacon, a staff only, marks the north-eastern side of the entrance.

On the hill side close to and above the lighthouse is a large yellow barracks with a red roof, and there are two other houses on this point visible from the south-westward; the barracks can be seen from a considerable distance.

On the hill behind the port, and about three-quarters of a mile north-eastward of the lighthouse, is a white wooden cross on a white stone pyramid.

Light.—The light on San Giovanni point is shown from a white staff on top of a white house with a red roof; close to it is the small white keeper's house, with a red roof.

Cancel "when bearing from N. 80° E., through north, to N. 28° W."

Mooring buoys.—Two red mooring buoys are placed close together on the northern bank of the port; a vessel anchors and lays out a stern hawser to the buoys.

Boat piers.—The pier near the Custom-house has 10 feet water at its outer end, and is strong enough for steamboats to go alongside. Immediately southward of it are two small piers for light boats. On the shore near the position of San Giovanni church is a light pier with 3 feet water at its head.

Water can be obtained from a well near the position of San Giovanni church; it is said to be good, but water obtained from the stream, or near it, at the head of the port is bad.

Communication.—Vessels of the Austrian Lloyd Societa in Azioni, Ungaro-Croata di Navigazione, Societa Anonima di Navigazione a Vapore, "Puglia" bari, call at Port San Giovanni di Medua regularly.

The road to Scutari, viâ Alessio, is good enough to be used by motor-cars and lorries.

Telegraph.—A telegraph cable has been laid between S. Giovanni di Medua and Brindisi.

Plan 1590, Durazzo bay.

Page 266.—DURAZZO BAY.—Town.—The population of the town of Durazzo was about 8,000 in 1911.

LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *fixed* light, showing *white* and *red* sectors, is exhibited, at 52 feet above high water, from a white steel skeleton mast with a red top, 51 feet high, near the quay at the south-eastern point of Durazzo; the *white* light should be seen from a distance of 10 miles, and the *red* of 6 miles. For the sectors of the light, *see* Light list and plan.

[illegible] continued. [illegible]

A beacon, a staff only, marks the northwestern side of the entrance.

On the hill side close to and above the lighthouse is a large yellow barracks with a red roof, and there are two other houses on this point visible from the south-westward; the barracks can be seen from a considerable distance.

On the hill behind the port, and about three-quarters of a mile northeastward of the lighthouse, is a white wooden cross on a white stone pyramid.

Light.—The light on San Clemente point is shown from a white tall on top of a white house with a red roof close to it in the small white keeper's house, with a red door.

[illegible] when bearing from N. to E. through south, is N. by W.

Mooring buoys.—Two iron mooring buoys are placed close together on the eastern side of the port; a vessel anchors and has not a stern hawser to the buoys.

Boat piers.—The pier near the Customhouse has 12 feet water at its outer end, and is strong enough for unloading a vessel; it is absolutely confined of it is too small place for light boats. The pier near the position of the stranded steamer has a total pier with 7 feet water at its head.

Water can be obtained from a well near the position of the [illegible] stranded; it is said to be good, but water is brought from the [illegible] at the head of the port is bad.

Communication.—Vessels of the American Lloyd touch in [illegible] Chanchamayo, Pisco, Arequipa, Mollendo, Iquique, [illegible] Valparaiso, "Pacific" line, call at Port San Clemente regularly.

The road to Nazca, via Lomas, is good enough to be used by [illegible] and horses.

Telegraph.—A telegraph wire has been laid between S. Clemente and Mollendo [illegible].

[illegible] Amazonas [illegible].

Page 266.—**DURANNO BAY.—TOWN.**—The population of the town of Duranno was about [illegible] in 1871.

LIGHT.—[illegible] and [illegible].

LIGHT.—A [illegible] light, showing white and red across, is exhibited, at 32 feet above high water, from a white steel skeleton tower with a red top, 31 feet high, near the quay at the south-western point of Duranno; the white light should be seen from a distance of 10 miles, and the red of 6 miles. [illegible] the notice of the lighthouse [illegible] and [illegible].

Page 266 continued. Plan 1590.

Conspicuous objects.—The following are conspicuous:—The trees in the Palace gardens near the light mast; a round tower on the hill above the town; a church to westward of the tower, white, with a red roof, and small white cupola; and the minaret at the mosque.

Pier.—There is a wooden pier with 5 feet of water alongside.

Water.—Shore water is from surface wells, and must be boiled before use.

Health.—Malaria is prevalent in summer, and Europeans suffer from bowel complaints.

Chart 2701, Gulf of Cattaro to Corfu.

Page 267.—LIGHT.—Samana point.—*Cancel* paragraph, and *substitute*:—

LIGHT.—Samana point.—Two *white fixed* lights, placed vertically at 46 and 30 feet above high water, are exhibited from a white iron mast, 52 feet high, with a dwelling near, about 3 cables from the south-western side of Samana point, and should be seen from a distance of 10 miles.

Page 268.—SASENO ISLAND.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white flashing* light *every minute* (flash, *five seconds*) is exhibited, at 328 feet above high water, from a white stone tower, 44 feet high, in the middle of the south-western side of a white dwelling, on the west coast of Saseno island, about half a mile from the north-west point, and should be seen from a distance of 25 miles. For the arc of visibility, *see* Light list and chart.

Page 269.—LIGHT.—Pelasgia point light is reported to be unreliable (1914).

Buoy.—The white buoy off Skala has disappeared.

CHAPTER X.

Chart 2701, Gulf of Cattaro to Corfu.

Page 273.—Georgantas shoal, about 200 feet long north-east and south-west, and 20 feet broad, with 1¼ fathoms water, lies about half a mile off-shore, with Lukovo chapel, which is situated 5¼ miles southward of Fort Borsi, bearing N. 54° E., distant 1¼ miles.

Plan 206, Channels of Corfu.

Santa Quaranta bay.—There is a stone pier, with deep water alongside, on the shore of the bay.

Pages 273, 274.—Margin.—*Cancel* "Plan of Butrinto bay on sheet 1455."

Plan 206.

Page 274.—Butrinto bay.—*Cancel* second paragraph, and *substitute*:—

There is anchorage in the bay in 14 to 16 fathoms water, stiff clay, with the point just southward of Cape Scala in line with Point S. Stephano, N. by W. ½ W., and the Custom house, a building with a flagstaff on a high spur open northward of the ruined fort of Votemi, in the middle of a marsh, N.E. by E. This is considered the best anchorage on the coast, but caution must be used in its approach, as the water shoals suddenly from 12 fathoms.

Butrinto river bar can only be crossed by boats.

Page 275.—A Custom-house is situated on the shore of a small bay, 1½ miles north-westward of Pagania North cape.

Page 281.—Corfu island.—The population of Corfu, according to the census of 1907, was 94,451.

Trade.—In 1912 the value of the exports was £398,461, and that of the imports £250,749. The value of the exports in 1913 was £77,014, the decrease being accounted for by there being no olive crop this year, the crop occurring every other year only. In 1913, 1,337 vessels of 1,292,831 tons entered and cleared the port of Corfu.

Page 282.—TIGNOSO ISLET.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light, showing *white fixed*, with a *red flash every minute*, is exhibited at 98 feet above high water, from a white circular tower, 55 feet high, on the summit of Tignoso islet; the *white* light should be seen from a distance of 14 miles, and the *red* flash of 15 miles.

Plan 1450, Corfu road.

Page 283.—Corfu town.—The church, situated about 2 cables west-south-westward of Point S. Nicolo, has a white tower, with a red roof; it is not conspicuous from the anchorage.

About 70 yards eastward of the church just mentioned is a white tower with a large red dome and gallery.

A high white stone chimney, with factory buildings attached, is situated at Kefalo mandukio, to the westward of Corfu town.

Breakwater.—Work on the proposed breakwater off Mandukio, shown by dotted lines on the plan has not been commenced (1913).

Page 284.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHTS.—A *white fixed* light is exhibited, at 245 feet above high water, from a white circular tower, 33 feet high, in the citadel, within Cape Sidero, and should be seen from a distance of 19 miles. For the arc of visibility, *see* Light list.

Page 274.—Buffalo Bay.—[illegible]

There is a change in the buoyage in the Bay in 1874 [illegible] with the point [illegible] Cape Stalk [illegible] Inner [illegible] Stephens, M. by W. and the Gaspee [illegible] [illegible] on a high [illegible] in the middle of a [illegible] M.H.W. [illegible] [illegible] in the [illegible] the water [illegible] [illegible]

Buffalo River has [illegible] by [illegible]

Page 275.—[illegible] 1½ miles north-west and of [illegible]

Page 281.—Corrin Island.—[illegible] to the census of 1871, [illegible]

Trade.—In 1872 the [illegible] and that in the [illegible] 1871, the [illegible] [illegible] 1,357 [illegible]

Page 282.—TIGNISH ISLIT.—LIGHT.—[illegible] [illegible] and [illegible]

LIGHT.—An [illegible] above, with a red [illegible] high water, from a white [illegible] of Tignish [illegible] 12 miles, and the red [illegible] of 10 miles.

[illegible] road.

Page 282.—Corrin town.—[illegible] north-westward of Tignish [illegible] road; it is not conspicuous from the anchorage.

About 70 yards eastward of the church [illegible] tower with a large red dome and [illegible].

A high white [illegible] with factory [illegible] situated at Tignish harbour, to the eastward of [illegible].

Breakwater.—Work on the proposed breakwater at Tignish, shown by red dots on the plan has not been commenced (1873).

Page 284.—LIGHT.—[illegible] paragraph, and substitute—

LIGHTS.—A white pond light is exhibited, at 340 feet above high water, from a white circular tower, 33 feet high, in the district within Cape Ahern, and should be seen from a distance of [illegible] For the arc of 1 Ability, see Light list.

Page 284 continued. Plan 1450.

A *white fixed* light is exhibited, at 17 feet above high water, from a lamp-post on the head of the mole near the Health (pratique) office, and should be seen from a distance of 2 miles; this light is difficult to distinguish from other similar lights shown in the harbour.

A *red fixed* light is exhibited, at 16 feet above high water, from a lamp-post at the entrance to the citadel moat, and should be seen from a distance of 2 miles.

Mooring buoy.—A white mooring buoy has been placed near Point S. Nikolo. Permission must be obtained for a vessel to moor to the buoy for more than six hours from the Captain of the Port, and the buoy must be quitted at his request.

Signal station.—There is a signal station at the citadel.

Vido island.—Light.—A small *red fixed* light is exhibited from the pier at the landing place on Vido island when the steam ferry boat is running.

Chart 206, Channels of Corfu.

Page 285.—Lefkimo point.—Lights.—*Cancel* section, and *substitute*:—

Lights.—A *red fixed* light is exhibited, at 22 feet above high water, from a metal pillar over an iron shed on Lefkimo point, and should be seen from a distance of 5 miles.

A *white fixed* light is exhibited, at 17 feet above high water, from an iron column on the middle of the pier on the southern side of Potami river, and should be seen from a distance of 3 miles.

Page 289.—Kastri point.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light, showing *white fixed* with a *red flash every minute*, is exhibited, at 348 feet above high water, from a white circular tower on a dwelling, 43 feet high, 360 yards within Kastri point, and should be seen from a distance of 25 miles. For the arcs of obscuration, *see* Light list.

PAXO ISLAND.—LIGHT.—*Cancel* paragraph. The lighthouse at Laka point was totally destroyed by a landslip in 1913. It is to be replaced by a *fixed* and *group flashing white* light, showing a group of *three* flashes *every twenty seconds*, to be seen from a distance of 23 miles.

Page 284 continued. Fine Lights.

A white fixed light is established, at 11 feet above high water, from a lamp-post on the head or roof-house over the fourth impingement office, and should be seen from a distance of 2 miles; the light is difficult to distinguish from other similar lights above in the harbour.

A red fixed light is established, at 12 feet above high water, from a lamp-post at the entrance to the alcohol room, and should be seen from a distance of 2 miles.

Mooring buoy.—A white mooring buoy has been placed near Point S. Nicolo. Permission must be obtained for a vessel to moor to the buoy for more than six hours from the Captain of the Port, and the buoy must be painted at its top-mast.

Signal station.—There is a signal station at the citadel.

Vido island.—Light.—A small red fixed light is established from the pier at the landing place on Vido Island when the steam ferry boat is running.

Page 285, Channels or Ports.

Page 285.—Lefkimo point.—Lights.—[illegible] and [illegible]:—

Lights.—A red fixed light is established, at 22 feet above high water, from a metal pillar over an iron and or [illegible] pedestal, and should be seen from a distance of 3 miles.

A white fixed light is established, at 17 feet above high water, from an iron column on the middle of the pier on the eastern side of Mistral river, and should be seen from a distance of 3 miles.

Page 286.—Kastri point.—LIGHT.—[illegible] paragraph, and add thereto:—

LIGHT.—An alternating red and flashing light, showing white and red alternately every minute, is established, at 8½ feet above high water, from a white circular tower on a dwelling, 41 feet high, 300 yards within Kastri point, and should be seen from a distance of 10 miles. For the arc of observation see Light list.

PAXO ISLAND.—LIGHT.—[illegible] paragraph. The lighthouse at Lake point was totally destroyed by a landslip in 1913. It is to be replaced by a fixed and group flashing white light, showing a group of white flashes every twenty seconds, to be seen from a distance of 28 miles.

CHAPTER XI.

Plan 1591, Prevesa strait.

Page 295.—PREVESA.—The population of the town of Prevesa was about 7,000 in 1911.

Trade.—In 1911 the value of the imports into Prevesa was £44,000, and that of the exports from the town £80,000. In the same year, 724 steam vessels, of 137,082 tons, and 84 sailing vessels, of 2,502 tons, entered the port.

Chart 203, Santa Maura, Ithaca, and Cephalonia islands.

Page 301.—LIGHT.—Araclo point.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white occulting* light *every six seconds* (eclipse, *two seconds*), with a *red* sector, is exhibited at 33 feet above high water, from a cylindrical masonry tower on a dwelling, 29 feet high, on Araklo point; the *white* light should be seen from a distance of 10 miles, and the *red* light of 6 miles. For the sector of *red* light, which covers Point Palmatero and the islets off it, *see* Light list and chart.

Plan 1609, Roadstead of St. Maura.

Page 303.—Santa Maura.—The population of the island was 29,471 in 1907.

Page 304.—Telegraph cable.—The telegraph cable crosses the canal just southward of the lighthouse between a small shed on each side.

The harbour of Santa Maura is a basin about 275 yards long, and 200 yards wide. The channel to the harbour is along the causeway connecting the mole to the town; there are depths of 12 feet nearly the whole way along the causeway, but shoal water extends from 10 to 30 yards from the stone wall. There are depths of from 13 to 16 feet in the harbour, and of 11 to 13 feet alongside the jetty. The Custom and Health offices are south of the jetty.

Mail steamers to and from Patras call here regularly five times a week, passing through the canal.

Santa Maura canal.—*Cancel* paragraph, and *substitute*:—

Santa Maura canal, between Santa Maura island and the mainland, runs southward from Santa Maura roadstead to Port Drepano, and is navigable by vessels of 14 feet draught, the depth in the middle of the canal being maintained by dredging to 14½ feet. The canal is dredged through mud-flats and shoals; it is about 3¼ miles long, 32 yards wide at the surface, and 16 yards at the bottom; its channel is clearly defined throughout by the colour of the water, which is light yellow in the deepest part and dark green on the shallows. The water in the canal falls with northerly winds, and rises with southerly

[illegible]

[illegible] 1890, [illegible]

Page 293.—PRESERVES.—The population of the town of [illegible] was about 7,000 in 1891.

Trade.—In 1891 the value of the exports from Preston was [illegible] and that of the imports from the same district. In the same year, 784 vessels nearly of 186,[illegible] tons cleared at sailing vessels, of 2,[illegible] tons, signed the port.

[illegible]

Page 300.—LIGHT.—Arcelo point.—[illegible]

LIGHT.—A white [illegible] light [illegible] is exhibited at [illegible] above high water, [illegible] a quadrilateral [illegible] tower on a [illegible] 30 feet high, [illegible] Arcelo point; the white light [illegible] from a distance of 10 miles, and the red light [illegible] the [illegible] of the light which covers Port [illegible] [illegible] 30 [illegible] high [illegible] water.

[illegible]

Page 303.—Santa Marta.—[illegible] population of the island was 10,[illegible] in 1897.

Page 304.—Telegraph cable.—[illegible] the [illegible] of the [illegible] and [illegible] cable.

The harbour of Santa Marta is a basin about 270 yards long and 200 yards wide. The channel to the harbour is along the [illegible] connecting the mole to the town; the depth of it is not nearly the whole way along the connexion, but dead water extends from 10 to 30 yards from the stone wall. There are depths of from 10 to 18 feet in the harbour, and of 7 to 10 feet along the jetty. The [illegible] and [illegible] are moored to the jetty.

Mail steamers to and from Europe call here regularly the [illegible] week, passing through the canal.

Santa Marta canal.—[illegible] passenger, and [illegible]:—

Santa Marta canal, between Santa Marta island and the mainland, was constructed from Santa Marta modernized to Port Ibera, and is navigable by vessels of 14 feet draught, the depth in the middle of the canal being maintained by dredging to 18½ feet. The canal is dredged through mud-flats and shoals; it is about 3½ miles long, 30 yards wide at the surface, and 10 yards at the bottom; its channel is clearly defined throughout by the colour of the water, which is light yellow in the deeper part and dark green on the shallows. The water in the canal is fresh and very [illegible], and the water [illegible]

Page 304 continued. Plan 1609.

winds, to the extent of about one foot; the movement of the water depends also on the winds.

The north entrance to the canal from Santa Maura harbour is marked by a small red disc beacon on the western side, and the eastern side is marked by the stone wall, 2 feet high, which continues southward to Paleo Khalia.

Shoal water extends from 10 to 15 yards off the stone wall the whole way.

A small red disc beacon is situated at the south end of the northern salterns, and a small cage beacon just northward of the end of the stone wall, both on the western side of the canal.

Between the two salterns a mud swamp, covered with seaweed, runs back towards the island, and Ruin islet is noticeable in the middle.

Paleo Khalia is marked by a group of four grey low houses. Off Paleo Khalia the canal is marked on the eastern side by a small red can mooring buoy and a beacon; southward of the beacon shoal water extends to the islet south-westward of Paleo Khalia. Thence the canal has a bank, 2 feet high, marked by stakes, on the western side, and the islet, with a small spit of shingle and stone to the northward, on the eastern side.

At the south end of the islet, and separated from it, is a pile of stones, abreast which, on the western side, is Red Hut point, with a pile of stones on the extreme, and 13 feet water close-to.

From these piles of stones the canal continues straight to its south entrance, and a pair of small red can mooring buoys, one on each side, are moored about 300 yards southward of Red Hut point, and midway between these buoys and the southern entrance is a similar pair.

The south entrance to the canal, which has about 4 fathoms water, is marked by a white stone pillar, about 4 feet high, on the eastern side, and a small red can mooring buoy on the western side; the width here is about 60 yards.

The remains of ancient moles extend from Observatory island on the east, to the stone pillar, and from the coast of Santa Maura island eastward to the red buoy; these remains are covered with from 8 to 10 feet water.

The stone wall on the eastern side of the canal is gradually crumbling away, being damaged by the wash from passing vessels.

There is a depth of 15 feet water alongside the quay on the eastern side abreast the citadel.

There are no regulations for entering or leaving the canal; in a vessel of any size it would be proper, before entering, to ascertain if any other vessel has entered from the opposite end.

There is a charge of 10 centesimi for every ton for vessels passing through the canal, vessels of war being exempt.

Page 304 continued. Plan 1609.

Floating bridge.—A floating bridge, worked by a hand winch and wire, crosses the canal just southward of the citadel; the wire is sunk on a vessel's approach; notice should be given by steam whistle.

The old channel, with from 7 to 13 feet water, is entered from the canal at the northern gap in the stone wall, opposite a wooden bridge with three arches, and trends southward through mud swamps, which are covered with about one foot water and thick seaweed. It crosses the canal, trending south-westward, through a break in the stone wall southward of the northern salterns, and then continues southward parallel to the canal, but separated from it by a bank, until near the south end of the stone wall, where it again crosses the canal, trending south-eastward. Thence the channel passes close south-westward of Paleo Khalia, eastward of the islet, and enters the canal between the two pairs of red buoys. Sailing vessels use this channel when the wind is less favourable in the canal; there is anchorage off Paleo Khalia, where there is a small pier.

Chart 206, Sta. Maura, Ithaca, and Cephalonia channels.

Page 305.—LIGHT.—Third paragraph: *Cancel* "Reported irregular, March, 1905."

Vasilico bay.—Light.—*Cancel* paragraph.

Plan, Meganisi channel, on sheet 1620.

Page 306.—Meganisi island.—Elia point.—Light.—A *red fixed* light is exhibited, at 46 feet above high water, from an iron column, 25 feet high, with its lower part surrounded by a white wall having a red band, on Elia point, the south-eastern entrance point of Port Atheni, and should be seen from a distance of 5 miles.

Petallis islet is 29 feet high.

Page 307.—Tiglia islet is 130 feet high.

Plan 1609, Roadstead of Santa Maura and Port Drepano.

Page 308.—PORT DREPANO.—*Cancel* second paragraph, and *substitute*:—

Fort S. Giorgios stands on a hill, 150 feet high, at the head of the bay; it is white and conspicuous. Observatory (Volios) islet, 16 feet high, lies off the western base of the hill. For submerged moles, beacon, and buoy, *see* Santa Maura canal, page 304.

There is anchorage at the head of the port in 7 to 12 fathoms water, good holding ground, south-westward of S. Giorgios fort. The inner anchorage extends about 2 cables northward of the western submerged mole, and has from 2½ to 3¼ fathoms water; it is used by small craft loading with salt.

Observatory islet.—Light.—A *fixed* light, showing *red* and *green* sectors, is exhibited, at 28 feet above high water, from a masonry

Page [illegible] continued. [illegible]

Floating bridge.—A floating bridge, worked by a hand wheel and wire, crosses the canal just downward of the [illegible]; the wire rank on a vessel's gypsum; motive [illegible] by [illegible] wheel.

The old channel. [illegible] the canal at the northern end of the [illegible] opposite a wooden bridge with three arches, and [illegible] through and swamps which are covered with [illegible] water [illegible] seaward. It crosses the canal, trending southwestward, through a break in the stone wall southward of the northern entrance, and then continues southward parallel to the canal [illegible] until it [illegible] until near the south end of the [illegible] wall, where it again crosses the canal, trending southwestward. [illegible] the canal passes [illegible] south-westward of Pace Island, [illegible] canal between the two parts of [illegible] channel when the wind is low [illegible] anchorage of Yolo [illegible] where there is a small [illegible].

(See [illegible], [illegible], [illegible] and [illegible] charts.)

Page 306.—LIGHT.—Third [illegible] irregular, March, 1901.

Vasillico Bay.—Light.—[illegible]

(See [illegible] chart.)

Page 306.—Meacham island.—Tilia point.—Light.—A red fixed light is exhibited at an [illegible] column, 28 feet high, with its lantern [illegible] having a red band on the [illegible] of Port Ashland and should be seen from a distance of 6 miles.

Petalia [illegible] is 73 feet high.

Page 307.—Light [illegible] is [illegible] feet high.

(See [illegible] Hydrographic [illegible] chart.)

Page 308.—PORT DRUMMOND.—[illegible] and anchorage:—

Port Drummond [illegible] the head of the bay [illegible] and [illegible]. Otherwise [illegible] the light, the [illegible] of the western [illegible] of the [illegible] harbor, and buoy, [illegible] Mount [illegible].

There is anchorage [illegible] the head of the port in 7 to 12 fathoms water, good holding ground, [illegible] of a [illegible]. The [illegible] and anchorage [illegible] the northward of the [illegible] shoals, and has from 2½ to 3½ fathoms water; it is used by small coasting vessels only.

Observatory island.—Light.—A [illegible] light, [illegible] and [illegible] is established at 32 feet above high water, [illegible]

Page 308 continued. Plan 1609.

column, 11 feet high, on Observatory islet, and should be seen from a distance of 5 miles. For the sectors of the light, *see* the plan.

In entering Port Drepano bay, leave the *red* sector to the eastward, and when anchoring at the head of the bay do not bring the *green* light eastward of N. 35° E.

Santa Maura canal.—Directions.—*Cancel* this section. *See* page 304.

Kephali point.—Light (intended).—A *white fixed* light, to be seen from a distance of 10 miles, is to be exhibited from Kephali point.

Page 309.—Miaulis rock.—Observatory islet light is obscured over this rock.

Chart 3496, Scropha point to Cape Kamilafka.

Page 313.—Filipos island is 93 feet, and Pistros island 145 feet, high.

Page 314.—DRAGAMESTI BAY.—Directions.—*Cancel* first paragraph, and *substitute*:—

Directions.—From the westward approach with the middle of the passage between Cape Turkovekla and the north point of Kaloyeros island bearing E. by S., which leads northward of Prasa shoal, southward of Venerable banks, and midway between Grant and Davy banks.

Plan 1939, Dragamesti bay and approaches.

Astokos.—Light.—A *red fixed* light is exhibited, at 20 feet above high water, from a stone pillar, surmounted by an iron ladder, on Astokos pierhead, and should be seen from a distance of 2 miles. The light is unwatched.

Page 315.—*Cancel* "Plan on 1455" in margin.

Glosa Pogonias (Snipe point).—Beacon.—A small red beacon, 5 feet high, stands on the south extreme of the point.

Port Plateali.—Clearing marks.—*Cancel* first paragraph, and *substitute*:—

Clearing marks.—The summit of Oxia island in line with the eastern extreme of Pondiko island, S. 5° E., leads one cable westward of the shoal off Glosa Pogonias, and 2 cables eastward of Day rock (view on plan 1939). Stenigonia white beacon, on the south-eastern side of Port Plateali entrance, in line with the red beacon on Carlo Glosa, S. 48° E., leads south-westward of the shoal off Glosa Pogonias, and north-eastward of Day rock.

Page 316.—*Cancel* "Plan 1455" in margin.

Plan 3485, Port Plateali.

Directions.—Carlo Glosa beacon is red (not black and white).

[illegible]

[illegible], 11 feet high, on observatory islet, and should be seen from a distance of 5 miles. For the colours of the light, see the plan.

In entering Port Dupetit-Thouars, keep the red sector to the eastward, and when anchoring at the head of the bay, do not bring the green light eastward of N. 30° E.

Santa Maura canal.—Directions.—[illegible] this section, see page 304.

Kephali point.—Light (intended).—[illegible] to be seen from a distance of 10 miles [illegible] point.

Page 309.—**Minulis rock.**—[illegible] this rock.

[illegible]

Page 312.—**Ithaca.**—[illegible] Ithaca island [illegible] island.

Page 314.—**DRAGAMESTI BAY.—Directions.**—[illegible] first paragraph, and substitute:—

Directions.—From the westward approach [illegible] the middle of the passage between Cape Dimokhrisi and the more point of Lefkimo [illegible] leading N. by E., which leads northward of Prasso [illegible] anchorage of Vamvaki bay, and midway between Prasso and Lazaretto [illegible].

[illegible]

Astakos.—Light.—[illegible] water, from a stone pillar, surmounted by an iron lantern, [illegible] pierced, and should be seen from a distance of [illegible] [illegible] is unwatched.

Page 315.—[illegible]

Cape Posonia (Ship point).—Beacon.—A small red beacon, 8 feet high, stands on the south extreme of the point.

Port Platanti.—Clearing marks.—[illegible] paragraph and substitute:—

Clearing marks.—The summit of Cape Island in line with the western extreme of Lundie Island, N. 77° E., leads one cable westward of the shoal of Cape Dupetit-Thouars, and 2 cables eastward of Day rock [illegible] (1889). Steadying white beacon, on the south-eastern side of Port Platanti entrance, in line with the red beacon on Cape Cleare, N. 30° E., leads southwestward of the shoal of Cape Dupetit-Thouars and northeastward of Day rock.

Page 316.—[illegible]

[illegible]

Directions.—[illegible] and [illegible] and [illegible] anchorage.

Page 316 continued. Plan 1939.

Petala island.—Beacon.—A white stone beacon stands on Aspro point, the south extreme of the island.

Page 317.—Channel eastward of Pondiko.—Shag rock in line with the north-west point of Petala bears S. 5° W. (not S. 5° E.).

Chart 3496, Scropha point to Cape Kamilafka.

Page 318.—At night, after losing sight of Oxia light, Oxia peak, Makri peak, Vromona island, Stamothi island, and the summits of Petala island, are usually noticeable; it is difficult to recognise the other islands from any distance.

From northward of Makri island, steer for the eastern extreme of Pondiko island, bearing N.E. by N., until the north extreme of Petala island bears S.E. by E., or until the west extreme of Pondiko island is in line with the east extreme of Provati island. Then steer N.E. by E. until the north-eastern extreme of Pondiko island bears N.W. by N., when steer about N. by E. to avoid Pondiko shoal.

Current.—A current, setting north-north-westward, has been frequently experienced at the southern entrance to this channel.

Chart 203, Santa Maura, Ithaca, and Cephalonia islands.

Page 320.—CEPHALONIA.—The population of Cephalonia was 71,235 in 1907.

Trade.—In 1912 the value of the exports from Cephalonia was £222,915, and that of the imports £253,466.

Page 321.—Guiscardo point.—Besides the present lighthouse, there is an old lighthouse on Guiscardo point; it is a round tower, about 30 feet high (above sea level), with an open firegrate on top. On the slight rise within Guiscardo point is an old square ruin, which is conspicuous from the southward.

LIGHT.—The light on Guiscardo point should be seen from a distance of 13 miles. The lighthouse is not conspicuous, there being a hill behind it.

Page 322.—Cape Dekalia.—LIGHT.—A *red fixed* light is exhibited, at 75 feet above high water, from a metal column on a dwelling, on Cape Dekalia, and should be seen from a distance of 6 miles.

Page 323.—Light (intended).—A *white occulting* light, with a *red* sector covering Kakova shoal, is to be established on Cape Kapri, and will be seen from a distance of 13 miles.

Plan 1557, Port Argostoli.

Page 325.—S. Nikolaos banks.—Clearing marks.—*Cancel* paragraph, and *substitute*:—

Clearing marks.—Argostoli signal station in line with Lardigo point, N. 22° E., leads westward, and Cape Gherogambo lighthouse, just open south-westward of Vardiani lighthouse, N. 50° W., leads south-eastward of S. Nikolaos banks.

Vardiani island lighthouse is yellow in colour.

Page 316 continued. Item 1808.

Petala island.—Beacon.—A white stone beacon stands on Aspre point, the north extreme of the island.

Page 317.—Channel eastward of Pendikio.—Shag rock in line with the north-west point of Petalo bears S. 35° W. (not S. 7° E.).

Chart 2196, Scopula point to Cape Akrotiriki.

Page 318.—At night, after losing sight of Cape Light, Cape point, Makri peak, Vromona island, Prasonisi island, and the summit of Petala island, are usually noticeable; it is difficult to recognize the other islands from any distance.

From northward of Makri island, over the eastern extreme of Pendikio island, bearing N.E. by N., until the north extreme of Petala island bears S.E. by E., or until the west extreme of Pendikio island is in line with the east extreme of Prasonisi island. Then steer N.E. by E. until the north-eastern extreme of Pendikio island bears N.W. by N., when steer about N. by E. to avoid Pendikio shoal.

Current.—A current, setting to the north-westward, has been frequently observed at the east entrance to this channel.

Chart 1611, Scala Nuova, Nikaria, and Pendikio islands.

Page 320.—CHERAMOKIA.—The population of Cheramokia was 1,320 in 1907.

Trade.—In 1912 the value of the exports from Lipsokhori was £22,316, and that of the imports £8,[illegible].

Page 321.—Cape Gnisocrio point.—To the the present lighthouse there is an old lighthouse on Gnisocrio point; it is a round tower about 30 feet high (above sea level), with an open fireplace on top; the slight pile within Gnisocrio point is an old stone pier, which is conspicuous from the southward.

LIGHT.—The light on Gnisocrio point should be seen from a distance of 12 miles. The lighthouse is conspicuous; there is a hill behind it.

Page 322.—Cape Delanio.—LIGHT.—A red fixed light is exhibited, at 73 feet above high water, from a metal column on a dwelling on Cape Delanio, and should be seen from a distance of 6 miles.

Page 322.—Light (intended).—A white omitting light, with a red sector covering Kalonas shoal, is to be established on Cape Kyra, and will be seen from a distance of 12 miles.

Plan 1607, Port Ayvalik.

Page 325.—S. Nikolaos banks.—Clearing marks.—Cancel paragraph, and substitute:—

Clearing marks.—Aivali-Ioli signal station in line with Lardiga point, N. 32° E., leads westward, and Cape Gnisocrio lighthouse just open south-westward of Vrakhni lighthouse, N. 30° W., leads south-eastward of S. Nikolaos banks.

Vardiani island lighthouse is yellow in colour.

Plan 1557.

Page 326.—Buoy.—*Cancel* paragraph. The buoy 6½ cables, S. ½ E., from S. Giorgios point, has been removed.

Caution.—*Cancel* paragraph.

Page 327.—Buoy.—*Cancel* paragraph. The buoy moored with San Theodoro point lighthouse bearing S. ½ E., distant 1¼ cables, has been removed.

LIGHT.—*Cancel* paragraph, and *substitute*:—

Port Argostoli.—Light.—A *white fixed* light is exhibited, at 36 feet above high water, from an openwork tripod with lamp on top, 27 feet high, on San Theodoro point, and should be seen from a distance of 4 miles. For the arc of visibility, *see* Light list and plan.

Directions.—*Cancel* paragraph, and *substitute*:—

Directions.—Pass not less than 3 cables westward of S. Theodoro point, and give the north-western and northern coasts of Argostoli promontory a berth of a quarter of a mile. Vardiani island lighthouse in line with S. Georgios point, S. 28° W., leads westward of the shoal water off S. Theodoro point, and the blue belfry of the Greek cemetery church open north-eastward of Argostoli promontory, S. 56° E., is a mark for turning eastward (passing northward of the shoal water extending from S. Theodoro point), and into the harbour.

Lixuri.—Light.—A *green fixed* light is exhibited, at 10 feet above high water, from the north molehead, and should be seen from a distance of one mile.

Page 328.—Livadi bay.—There is a wooden pier for boats on the north-western shore of the bay. The marshes here are intersected by wide deep creeks.

Argostoli.—The harbour.—*Cancel* second paragraph, and *substitute*:—

The harbour is about 6 cables wide at the entrance, and narrows towards the head. The west shore is bordered by shoal water to the distance of 1½ cables, and must be given a sufficient berth. The projecting points of the east shore of Livadi bay in line with Kokkinos Vrachos, N. 14° W., astern, lead up the bay, in from 11 to 10 fathoms water, until the British Consulate bears S. 84° W., when a large vessel should anchor.

Light-beacon.—A *white fixed* light is exhibited, at 9 feet above high water, from a stone beacon surmounted by a lamp-post, in 2½ fathoms water, about 1½ cables eastward of the shore at the northern end of the town, and should be seen from a distance of about one mile. The stone beacon is a truncated pyramid in shape, 5 feet high, and the top is 5 feet square.

The town.—The British Consulate, prison, statue, and the French and American Consulates, are conspicuous.

from 1867.

Page 326.—Buoy.—Cancel paragraph. The buoy (¾ cables, S. ½ E., from S. Georgio point) has been removed.

Caution.—Cancel paragraph.

Page 327.—Buoy.—Cancel paragraph. The buoy marked with San Theodoro point lighthouse bearing S. ½ W. distant ½ cables, has been removed.

LIGHT.—Cancel paragraph and substitute:—

Port Argostoli.—Light.—A white fixed light is exhibited, at 24 feet above high water, from an opening cut in the roof of a building, 27 feet high, on San Theodoro point, and should be seen from a distance of 4 miles. For the arc of visibility, see Light list and plan.

Directions.—Cancel paragraph, and substitute:—

Directions.—Does not lee than 2 cables, measured at N. Theodoro point, and give the north-western and northern coast of Argostoli promontory a berth of a quarter of a mile. Vardiani island lights are in line with S. Georgio point, S. 26° W., leads westward of the shoal water off S. Theodoro point, and the lone belfry of the Greek cemetery church open north-eastward of Argostoli promontory, S. 60° E., is a mark for turning eastward passing northward of the shoal water extending from S. Theodoro point, and into the harbour.

Lixuri.—Light.—A green fixed light is exhibited, at 10 feet above high water, from the north end, and should be seen from a distance of one mile.

Page 328.—Livadi bay.—There is a wooden pier for boats on the north-western shore of the bay. The marshes here are intersected by wide deep creeks.

Argostoli.—The harbour.—Cancel second paragraph, and substitute:—

The harbour is about 6 cables wide at the entrance, and narrows towards the head. The west shore is bordered by shoal water to the distance of 1½ cables, and must be given a sufficient berth. The prominent points of the east shore of Argostoli bay in line with Ifestiones Vardos, N. 14° W., astern, lead up the bay in from 11 to 10 fathoms water, until the British Consulate bears N. 34° W., when a large vessel should anchor.

Light-beacon.—A white fixed light is exhibited, at 3 feet above high water, from a stone beacon surmounted by a lamp-post, in 2½ fathoms water, about 1½ cables eastward of the shore at the northern end of the town, and should be seen from a distance of about one mile. The stone beacon is a truncated pyramid in shape, 6 feet high, and the top is 6 feet square.

The town.—The British Consulate, prison, stores, and the French and American Consulates, are conspicuous.

Page 328 continued. Plan 1557.

Trade.—In 1913, 99 vessels, of 116,356 tons, entered and cleared the port of Argostoli. In the same year the value of the exports was £166,165, and that of the imports £240,781.

Hospital.—A new hospital, with 200 beds, is situated about a cable southward of the British Consulate; it is a noticeable building of white stone with a red roof.

The anchorage.—*Cancel* first paragraph, and *substitute*:—

The anchorage is about 3½ cables eastward of the British Consulate, in 10 fathoms water, mud and good holding ground; moderate-sized vessels go further in, and anchor nearer the eastern shore. The Greek church, with its belfry painted blue and white, and the windmills near the Protestant cemetery on the south-eastern shore, are good marks. With strong southerly winds vessels anchor under the lee of S. Theodoro point.

Chart 203, Santa Maura, Ithaca, and Cephalonia islands.

Page 329.—Cape Gheroghambo.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating group flashing* light *every five seconds*, showing two *white* and two *red* flashes alternately (duration of each flash, *one-tenth of a second;* eclipse between each flash in group, *nine-tenths of a second;* eclipse between groups, *three and nine-tenths seconds*), is exhibited, at 164 feet above high water, from a square yellow masonry tower, 51 feet high, with dwelling attached, on Cape Gheroghambo; the *white* flashes should be seen from a distance of 19 miles, and the red flashes of 15 miles. The lighthouse does not show well.

Page 331.—ITHACA.—The population of Ithaca was 11,715 in 1906.

Plan, Gulf of Molo and Port Vathi, on sheet 1620.

Page 333.—Port Vathi.—There is a pier, with 6 feet water alongside, on the north-eastern shore of the port, just southward of the point charted eastward of the Prison islet, which point apparently does not exist.

The main landing pier, close to the Police and Health office, has 6 feet water alongside.

There are bollards along the sea front from the main landing pier to a position southward of the Prison islet, and thence there are ring bolts on the shore of the bay westward of the islet.

A wharf.—*Cancel* paragraph.

Anchorage is reserved for men-of-war in the bay westward of the Prison islet; it is recommended by the Captain of the Port (1912) as being the best-sheltered position from the heavy south-west to

Page 322 continued. Line 22.

Trade.—In 1913, 39 vessels of 17,[illegible] tons entered and cleared the port of Aristotle. In the same year the value of the exports was £[illegible], and that of the imports £[illegible].

Hospital.—A new hospital with 200 beds is situated about a mile southward of the Bishop's Consulate, a conspicuous building of white stone with a red roof.

The anchorage.—Same as last paragraph but substitute—

The anchorage is about [illegible] miles distant of the British Consulate, in 8 fathoms water, mud and good holding ground; moderate-sized vessels go within it, and anchor near the eastern shore. The Greek church, with its white pointed tower and white and the adjacent Protestant cemetery on the north eastern shore, are good marks. With strong southerly winds vessels anchor under the lee of St. Theodore point.

Place 321, Sheet Mount, Jebel, and Cyprus on Admiralty.

Page 322.—Cape Gheorghambo.—LIGHT.—Same as last paragraph, and substitute—

LIGHT.—An occulting green (visible [illegible]) every [illegible] showing two white and two red alternately, duration of each flash, one-third of a second; eclipse between each flash in group, [illegible] of a second; eclipse between groups, [illegible] seconds). Is established at 100 feet above high water, from a square yellow masonry tower, 31 feet high, and dwelling attached, on Cape Gheorghambo; the white flashes should be seen from a distance of 10 miles, and the red flashes of 7½ miles. The lighthouse does not show well.

Page 323.—ITHACA.—The population of Ithaca was 11,715 in 1908.

Plan, Gulf of Molo and Port Vathi, as above.

Page 323.—Port Vathi.—There is a pier, with 6 feet water alongside, on the north-eastern shore of the port, just southward of the point charted eastward of the Prison Islet, which point apparently does not exist.

The main landing pier, close to the Police and Health offices, has 6 feet water alongside.

There are bollards along the sea front from the main landing pier to a position southward of the Prison Islet, and there are ring bolts on the shore of the bay westward of the Islet.

A wharf.—Same as last paragraph.

Anchorage is reserved for men-of-war in the bay westward of the Prison Islet; it is recommended by the Captain of the Port as being the best-sheltered position from the heavy south

Page 333 continued. Plan on sheet 1620.

north-west squalls. The bottom is steep-to along the shore of this bay, 6 fathoms being obtained within 25 yards in many places.

Vessels anchored here should be secured by the stern to the ring bolts above mentioned, which are good and sunk in 9 feet of concrete and rubble; the holding ground is good.

Wind.—The wind usually freshens about 4h. p.m., and lasts, with heavy north-westerly squalls from the mountains, till about 8h. p.m.

CHAPTER XII.

Chart 207, West coast of Morea, &c.

Page 334.—ZANTE.—The population of Zante was approximately 38,000 in 1912; the census was taken in 1907, when it was 42,502.

Cape Skinari light should be seen from a distance of 21 miles.

Plan 1762, Zante bay.

Page 335.—Krionero point.—Light.—Krionero point light should be seen from a distance of 14 miles. *Cancel* "Reported irregular, 1902."

Zante bay.—The light exhibited from the molehead should be seen from a distance of 5 miles.

Dimitri shoal.—Buoy.—*Cancel* paragraph, and *substitute*:

Buoy.—A white buoy is sometimes moored about half a cable north-eastward of Dimitri shoal.

Page 336.—Caution.—*Cancel* paragraph.

Telegraph cables.—Buoys.—There is now only one buoy marking the telegraph cables; it is moored about 7 cables north-eastward of the mole light.

Add to **Caution.**—The area in which anchorage is prohibited is marked by a pecked line on the plan.

Zante town.—The population of the town of Zante was 15,780 in 1907.

Page 337.—Trade.—In 1913 the value of the imports at the port of Zante was £37,243, and that of the exports £169,520. In the same year 111 vessels of 161,132 tons entered and cleared the port.

Chart 207, West coast of Morea, &c.

MONTAGUE ROCKS.—Clearing marks.—Cape Katakolo in line with Cape Trepito, S. 32° E., leads nearly 1½ miles north-eastward of the rocks.

Page 339.—Stamphani islet.—LIGHT.—The *white fixed* light should be seen from a distance of 12 miles, and the *red flash* of 17 miles. *Cancel* "(Reported irregular, and visible only 10 miles, 1905)."

Plan 1676, Gulf of Patras and approaches.

Page 340.—Missolonghi approach.—LIGHTS.—*Cancel* section and *substitute*:—

LIGHTS.—An *occulting* light *every four seconds* (eclipse, *one second*), showing *white* and *red* sectors, is exhibited, at 41 feet above high water, from a white circular masonry tower, 37 feet high, on the south-eastern point of Sosti island; the *white* light should be seen from a distance of 11 miles, and the *red* light of 9 miles. For the sectors of the light, *see* Light list and plan.

A *red fixed* light is exhibited, at 26 feet above high water, from an iron column on a masonry base, 20 feet high, on Turlide island, the landing place for Missolonghi, and should be seen from a distance of 5 miles.

Page 341.—Bukari point.—LIGHT.—*Cancel* paragraph. The light has been discontinued.

Plan 427, Entrance to the Gulf of Corinth.

Page 342.—Anti Rhion point.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white occulting* light *every five seconds* (eclipse, *one second*) is exhibited, at 49 feet above high water, from a round masonry tower, on the south bastion of Anti Rhion fort (Rumelia castle), and should be seen from a distance of 12 miles.

Rhion (Morea castle).—Light.—A *fixed* light, showing *green* towards the Gulf of Patras, and *red* towards the Gulf of Corinth, is exhibited, at 36 feet above high water, from an iron column on the north-eastern part of Morea castle, Rhion, and should be seen from a distance of 4 miles.

Plan 1225, Patras roads.

Page 343.—Patras roads.—Moorings.—*Cancel* paragraph.

Lights.—The light on S. Nicolas molehead is difficult to distinguish from the town lights.

Page 344.—Pilots.—There appears to be no necessity of communicating with the Captain of the Port before entering.

Directions.—The castle in ruins on the hill at the back of the town is not red.

Town.—The approximate population of Patras was 38,000 in 1913.

Coal and supplies.—*Cancel* paragraph, and *substitute*:—

Coal and supplies.—There are usually about 2,000 tons of coal in stock. There is no coaling wharf, but from 200 to 350 tons can be put on board a vessel from hulks and lighters in 24 hours. It should be noted that when coal is ordered to be ready in lighters for a vessel

Page 344 continued. Plan 1225.

previous to her arrival, some of it is often dropped overboard in shallow water at night. The water is not fit for drinking. Provisions are obtainable.

Trade.—In 1913, 90 British steam vessels, of 252,090 tons, entered the port.

Steam vessels of the Cunard and Ellerman lines leave Liverpool fortnightly for Patras direct, and the Cunard Company have established an emigration service by some of its largest vessels between Patras and New York.

Plan 427, Entrance to the Gulf of Corinth.

Page 346.—Naupaktos.—Light.—A *green fixed* light is exhibited, at 52 feet above high water, from an iron column, 25 feet high, on the eastern side of the boat harbour entrance, and should be seen from a distance of 5 miles.

Page 347.—Deprano point.—Light.—*Cancel* paragraph, and *substitute*:—

Drepano point.—Light.—An *alternating flashing* light, showing *white* and *green* flashes, of *half a second* duration, alternately *every two and a half seconds*, is exhibited, at 30 feet above high water, from a cylindrical masonry tower, 25 feet high, with a dwelling attached, 2 cables south-eastward of the extreme of Drepano point, and should be seen from a distance of 11 miles. From distances greater than 5 miles the *green* flash appears *white*.

Chart 1600, Gulf of Corinth.

Page 348.—Eratini.—Light.—A *red fixed* light is exhibited, at 10 feet above high water, from Eratini village, and should be seen from a distance of one mile.

Plan 221, Ports Galaxidi and Itea.

Page 350.—Port Galaxidi.—Light.—A *red fixed* light is exhibited, at 11 feet above high water, from a wooden post on the wharf at Galaxidi, and should be seen from the distance of one mile.

Page 351.—Port Itea.—Light.—The light on Itea pierhead should be seen from a distance of 2 miles.

Page 353.—*Cancel* "Plan of Corinth bay on 1367" in margin.

Page 354.—*Cancel* "Plan of Corinth bay and isthmus, 1367" in margin, and *substitute* Chart 1600, Gulf of Corinth.

Chart 1600, Gulf of Corinth.

Cape Melangavi.—Light.—*Cancel* "Reported irregular, 1908."

Cancel "Plan of Corinth road on 2021" in margin, and *substitute* Plan, Corinth roads on chart 1600.

Page 354, continued. Chart 1600.

Cancel "Plans 2021, 1637" in margin abreast **CORINTH CANAL,** and *substitute*: Chart 1600, and plans, Corinth roads and Kalamaki bay.

Chart 1600, and plans, Corinth roads, and Kalamaki bay.

Page 355.—Corinth canal.—The railway bridge over the canal is 144 feet clear above the water.

Lights.—The *red* and *green fixed* lights exhibited from the mole-head at Poseidonia and Isthmia should be seen from a distance of 6 miles.

The pairs of *white* electric lights on either side of the canal are placed about 218 yards apart.

Cancel "Plans 1637, 2021" in margin, and *substitute* Chart 1600 with plans.

Directions.—*Cancel* second paragraph, and *substitute*:—

Current.—Signals.—Signals indicating the current are exhibited from the signal mast at each end of the canal, thus:—

By day, two triangular white flags, and at night, two lights, placed vertically, the upper *red* and the lower *white*, indicate that the current is entering the canal from that end.

By day, a white triangular flag, and at night, two *red* lights, placed vertically, indicates that the current is going out of the canal from that end.

No signal at the signal mast indicates no current.

Page 356.—*Cancel* "Plans 1367, 2021" in margin, and *substitute*: Chart 1600.

Passage restricted.—Vessels are prohibited from passing through the canal between 6h. p.m. and 6h. a.m. until further notice, in consequence of a landslip; passage at other times is permitted as usual.

Regulations.—The following additional regulations have been made by the New Corinth Canal Society (1909):—

On entering and leaving the canal the speed should be reduced to 5 knots in order to avoid damages to vesels anchored in the ports of Poseidon and Isthmia, or to the ferry boats.

The charge for towage in the canal by the society, with the means at its disposal, is for vessels of from 50 to 150 tons 34 francs, of from 150 to 500 tons 50 francs, of over 500 tons 50 francs for the first 500 tons and for every ton above 500 tons ·005 franc per ton, without any responsibility to the society.

The society has the right to enforce towage for all vessels over 800 tons.

Page 356 continued. Chart 1600.

Pilots are placed at the disposition of captains of vessels intending to go through the canal at a charge of 1½ centimes per ton, with a minimum charge of 10 francs. The pilots give the captains their experience and knowledge of the canal, but the captains are responsible for their vessels taking the ground, or for any other accident whatever.

The charges for going through the canal are: For vessels of war, mail steam vessels, and yachts, under 200 tons, for every ton, coasting trade and Adriatic, one franc gold; Mediterranean, 0·6 franc. From 200 to 500 tons as for 200 tons with for every ton above 200 tons, coasting, 0·7 franc; Adriatic, 0·4 franc; Mediterranean, 0·3 franc. Over 500 tons as for 500 tons with for every ton above 500 tons, 0·1 franc.

Cargo steam vessels under 200 tons, for every ton, coasting and Adriatic, one franc; Mediterranean, 0·6 franc. From 200 to 500 tons as for 200 tons with for every ton over 200 tons, coasting, 0·7 franc; Adriatic, 0·3 franc; Mediterranean, 0·2 franc. Over 500 tons as for 500 tons with for every ton above 500 tons, 0·1 franc.

The minimum charge for steam vessels is 20 francs gold.

Ferry boats are established near each end of the canal, one at Poseidonia, and the other at Isthmia.

Plan, Vostitza bay, on sheet 463.

Page 357.—VOSTITZA BAY.—The population of the town of Vostitza was about 7,850 in 1913.

Chart 207, West coast of Morea.

Page 359.—Glarenza.—Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *red fixed* light is exhibited, at 30 feet above high water, from an iron pillar on the coast about 3 cables south-eastward of Cape Glarenza, and should be seen from a distance of 6 miles.

The mole, 2½ cables eastward of the light, and from which the light was formerly exhibited, has been partially destroyed, and its submerged portion constitutes a danger to navigation; in entering the bay, therefore, pass 3 cables eastward of the light.

Plan, Katakolo bay, on chart 207.

Page 360.—Cape Katakolo.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—A *white fixed* and *flashing* light *every two minutes*, thus:—fixed, *ninety seconds;* eclipse, *nine and a half seconds;* flash, *eleven seconds;* eclipse, *nine and a half seconds*, is exhibited at 149 feet above high water, from an octagonal grey stone tower, 29 feet high, on the slope of a ridge about 4 cables northward of Cape Katakolo, and

Page 360 continued. Plan on chart 207.

should be seen from a distance of 18 miles. From short distances the eclipses are not total.

Katakolo bay.—Light.—The light exhibited from the mole in Katakolo bay should be seen from a distance of 5 miles.

Chart 207, West coast of Morea.

Page 361.—Kyparissia.—Light.—A *red fixed* light is exhibited, at 33 feet above high water, from a metal column, 20 feet high, 118 yards within Kyparissia molehead, and should be seen from a distance of 7 miles. The light has been temporarily discontinued.

Plan, Methoni, on chart 207.

Page 365.—METHONI.—Mole.—*Cancel* paragraph, and *substitute*:—

Mole.—The marble pillar is connected to Kastelli Methoni by a mole, and a mole extends about half a cable eastward from the marble pillar, forming a shelter to the northward for small vessels.

Light.—The *red fixed* light is exhibited from the eastern end of the mole.

Plan 682, Gulf of Kalamata.

Page 366.—SAPIENZA ISLAND.—LIGHT.—*Cancel* paragraph and *substitute*:—

LIGHT.—A *white flashing* light *every minute* (flash, *nine seconds*), is exhibited, at 361 feet above high water, from an octagonal tower, 24 feet high, on the south-west summit of Sapienza island, and should be seen from a distance of 26 miles. From distances less than 12 miles a faint light is visible between the flashes. For the arc of visibility, *see* Light list.

Plan, Koroni anchorage, on chart 207.

Page 369.—Koroni bay.—Light.—The lighthouse on Koroni mole has been destroyed by the sea (1914).

Plan, Kalamata harbour, on 682.

Page 370.—Kalamata.—Lights.—The *green* light exhibited from the molehead should be seen from a distance of 5 miles.

Plan 682, Gulf of Kalamata.

Page 371.—CAPE KITRIES.—LIGHT.—The light should be seen from a distance of 13 miles.

Chart 1685, Venetico island to Spezzia island.

The coast.—Skardamula village.—*Cancel* "Skardamula" and *substitute* Kardamili.

[illegible] continued. [illegible] page [illegible].

[illegible] should be seen from a distance of 12 miles. From short distances the [illegible] are not total.

Katakolo bay.—Light.—The light established from the mole in Katakolo bay should be seen from a distance of 5 miles.

[illegible] page [illegible], West coast of Morea.

Page 361.—Kypparissia.—Light.—A red fixed light is exhibited, at 33 feet above high water, from a metal column, 20 feet high, [illegible] yards within Kypparissia molehead, and should be seen from a distance of 7 miles. The light has been too powerfully discontinued.

[illegible] Morea, on page [illegible].

Page 363.—SIGTHONI.—Mole.—Small parapet, and [illegible]

Mole.—The marble pillar is connected to Sakelli Mirtoni by [illegible] and a mole extends about [illegible] yards outward from the main [illegible] forming a shelter to the motorboats for small vessels.

Light.—The red fixed light is exhibited from the [illegible] on the mole.

[illegible] East coast of Kalymnos.

Page 364.—SAPIENZA ISLAND.—LIGHT.—[illegible] Peloponnesus and [illegible]

LIGHT.—A white flashing light [illegible] is established, at 30 feet above high water, from an [illegible] tower 24 feet high, on the south-east angle of Sapienza Island, and should be seen from a distance of 9 miles. From distances beyond 12 miles a faint light is visible between the flashes. [illegible] Sapienza, see Ionian Isl.

[illegible] Ionian archipelago, on page [illegible].

Page 369.—Koroni bay.—Light.—The [illegible] has been destroyed by the sea [illegible].

[illegible] Kalamata Bay, on [illegible].

Page 370.—Kalamata.—Lights.—The [illegible] light established from the northend should be seen from a distance of 5 miles.

[illegible] East coast of Kalymnos.

Page 371.—CAPE KITTLIES.—LIGHT.—The [illegible] should be seen from a distance of 12 miles.

[illegible] Ionian island of Zante.

The coast.—Skardamula village.—[illegible] and a [illegible] Kardamili.

Page 371 continued. Chart 1685.

Light.—*Cancel* paragraph, and *substitute*:—

Light.—A *red fixed* light is exhibited, at 45 feet above high water, from a lamp-post on a stone base, 20 feet high, north of the jetty at Port Kardamili, about 4 cables northward of Chapel islet, and should be seen from a distance of 5 miles.

Chart 3372, Gulf of Lakonikos.

Page 373.—CAPE MATAPAN.—LIGHT.—*Cancel* paragraph, and *substitute*:—

LIGHT.—An *alternating fixed* and *flashing* light, showing *white fixed*, with a *red* flash *every two minutes*, thus:—*white* fixed (intensified), *seventy-two seconds; white* fixed (faint), *twenty seconds; red* flash, *eight seconds; white* fixed (faint), *twenty seconds*, is exhibited, at 134 feet above high water, from a masonry tower near the extreme of Cape Matapan, and should be seen from a distance of 17 miles.

APPENDIX II.

List of Principal Ports, showing particulars of depths, &c.

PORT.	Depth at L.W.O.S. in channel of approach.	Depth at L.W.O.S. in anchorage.	Rise of Tide.	REMARKS.
Argostoli	15 fathoms	7 to 13 fathoms	—	Anchorage 5 miles long and one mile broad.
Brindisi harbour—				
Outer road	10 fathoms	7 to 9 fathoms ..	—	Open northward and north-eastward.
Inner road	4¾ fathoms	5½ to 6 fathoms	—	Open eastward.
Inner harbour ..	4¾ fathoms	4½ to 5½ fathoms	—	Landlocked.
Cattaro, Gulf of ..	15 fathoms	5 to 15 fathoms	—	Anchorages in Topla and Teolo bays, and at head.
Corfu road	18 fathoms	10 to 16 fathoms	—	Anchorage 2 miles long and half a mile broad.
Fiume	30 fathoms	9 to 24 fathoms	¾ ft.	
Plateali (Platea) ..	15 fathoms	10 to 14 fathoms	¾ ft.	Sheltered anchorage 5 cables long and 3 cables broad.
Pola	17 fathoms	6 to 16 fathoms	1¼ ft.	Sheltered.
Trieste—				
Outer bay	11 fathoms	10 fathoms	2¼ ft.	Open westward.
Franz Josef harbour	10 fathoms	8 to 10 fathoms	2¼ ft.	Sheltered by breakwaters.
Venice—				
Port Lido	25 feet	23 feet	4 ft. spgs., 2¼ ft. nps.	
Port Malamocco	27 feet	25 to 28 feet ..	,,	27 feet water in channels to Venice.

APPENDIX II.

List of Principal Ports, showing particulars of depths, &c.

Name.	[illegible]	[illegible]	[illegible]	Remarks.
Amoy	12 fathoms	7 to 12 fathoms	—	Anchorage [illegible]
Bangkok bar—				
Outer bar	10 fathoms	1 to 3 fathoms ..	—	[illegible]
Inner bar	4½ fathoms	2½ to 3 fathoms	—	[illegible]
Inner harbour ..	4½ fathoms	4½ to 7 fathoms	—	[illegible]
Chefoo (Kiaoli) ..	15 fathoms	3 to 11 fathoms	—	Anchorage in High and Low Bays, and at Island.
Foochow bar	18 fathoms	3 to 5 fathoms	—	Anchorage [illegible]
Tientsin	20 fathoms	[illegible]	2 ft.	
Hankow (Hanyang) ..	15 fathoms	[illegible]	½ ft.	Anchorage [illegible]
Yokohama	17 fathoms	4 to 16 fathoms	1½ ft.	Shallow
Yokohama—				
Outer bay	11 fathoms	10 fathoms	0½ ft.	Open anchorage
Inner Anchorage				
harbour	10 fathoms	3 to 10 fathoms	2½ ft.	[illegible] water
Yokohama—				
Port side	25 feet	20 feet	3 ft. [illegible] 2½ ft. [illegible]	
Port Shinagawa ..	22 feet	[illegible] ..	17 feet water in channels in tides.	

APPENDIX III.

Particulars of Dry Docks and Patent Slips.

PORT.	Name of Dock.	Length. On Blocks.	Length. Over all.	Breadth of Entrance.	Depth at H.W.O.S. On Sill.	Depth at H.W.O.S. On Blocks.	Lifting Power.	Date Built.	Remarks.
		Feet	Feet	Feet	Feet	Feet	Tons		
Brindisi	*Floating*	—	—	—	—	—	7,000	—	*Under construction.*
Venice	Government No. 1	488	524	80	25½	—	—	1878	
	,, ,, 2	272	295	59	19½	—	—	—	
	Dry dock	*774* / *810**	*784* / *820**	*118*	*39*	—	—	—	*Building.*
	Floating	—	365	61	—	22	4,500	—	In Giudecca channel.
Trieste	Austrian Lloyds	446	446	68	19	18	—	—	
	,, ,,	—	360	54	18½	—	—	—	
	San Rocco	394	414	66†	26	22½	—	—	† At coping.
	Floating (Stabilimento Technico)	197	197	56	—	—	2,000	1894	
	Floating (Monfalcone) No. 1	450	450	85	31½	28	12,000	—	
	,, ,, ,, 2	—	—	—	—	—	1,500	—	
	Patent slip	150 (cradle)	—	—	Forward Aft	6 14	450	—	
Pola	Government No. 1	418 / 447*	452	82½	27	—	—	—	No. 1 dock can be lengthened to 447 feet on blocks, with the caisson in the outer stop.
	,, ,, 2	411	450	91	29	—	—	—	
	Floating ,, 1	—	300	82	—	20	600	—	
	,, ,, 2	455½	460½	85	37	33	15,000	—	
	,, ,, *3*	—	—	—	—	—	*40,000*	—	*Building.*
	,, New	—	584¾	111½	41	37 1/12	22,500	—	
	T.B. No. 1 floating	—	100¾	29	—	16	900	—	
	,, ,, *2* ,,	—	—	—	—	—	*1,000*	—	*Building.*
Fiume	Floating, Government	—	247	65½	—	22	3,750	—	
	,, Whitehead	—	229⅔	49¼	20	—	1,300	—	

* With caisson in outer stop.

APPENDIX III.

Particulars of Dry Docks and Patent Slips.

Place.	Name of Dock.	Length on Blocks.	Length over all.	Breadth at Entrance.	Depth on Sill at H.W.O.S.	Depth on Blocks at H.W.O.S.	Lifting Power.	Date Built.	Remarks.
		Feet.	Feet.	Feet.	Feet.	Feet.	Tons.		
Shoreham	Floating Dock No. 1	—	—	—	—	—	7,000	—	Floats constructed.
Tilbury	Government Dock No. 1	185	235	30	24½	—	—	1860	
	" " 2	272	302	50	19½	—	—	—	
	Alexandra	244	274						
	"	240	270	45	22	—	—	—	Building.
	Victoria	—	305	61	—	22	4,300	—	In Contract Journal
Tyne	Jarrow Lifting	116	132	26	13	15	—	—	
	" "	—	300	51	18½	—	—	—	
	New Dock	335	415	56	29	22½	—	—	Not Sunny
	Floating (Sectional)								
	Floating (Sectional)	157	170	40	—	—	2,000	1864	
	Floating								
	Floating (Sectional No. 3)	150	150	—	21½	25	12,000	—	
	" " 4	—	—	—	—	—	1,500	—	
	Patent Slip	150	—	—	Reversed	8	1,000	—	
					16	11			
Pola	Government No. 1	115	152	24	27	—	—	—	Dock is on the Engineering to Lift Iron or Timber, and is the only slip.
	" " 2	111	156	30	20	—		—	
	Floating " 1	—	280	52	—	20	600	—	
	" " 2	1551	1601	55	27	23	15,000	—	
	" " 3	—	—	—	—	—	20,000	—	Building.
	" " 4	264	314	44	21	24½	22,500	—	
	T. B. No. 1 Floating	—	1005	52	—	16	900	—	
	" " 2	—	—	—	—	—	1,000	—	Building.
Rouen	Floating Government	—	217	65	—	25	3,750	—	
	" Private Local	—	250	19½	20	—	1,500	—	

* With caisson in entire slip.

APPENDIX IV.

Places (spots) where reliable magnetic observations have been made, and which should, if practicable, be re-occupied when making future observations.

Place.	Lat. and Long.	Position.
Argostoli	38° 11′ 36″ N. 20° 27′ 45″ E.	50 yards East from San Theodoro point lighthouse.
Corfu	39° 38′ 0″ N. 19° 56′ 0″ E.	Vido island, summit. Citadel lighthouse vane 169° 16′ true. Tower 246° 28′ true. House on islet 294° 2′ true.
Navarin ..	36° 56′ 24″ N. 21° 42′ 57″ E.	Midway between two small but conspicuous trees, 10 yards apart, situated on the beach 325° true, 1⅓ cables from the bridge over Xerias river. Transits :— (1) → Marathonisi open just to the left of Mount Ælias. (2) → Large yellow house just open to right of distant mountain. (3) Summit of cone-shaped mountain midway between two conspicuous houses on plain.
Patras ..	38° 15′ 15″ N. 21° 44′ 10″ E.	On breakwater about 100 yards from north end. Transit: Light staff on N. mole in line with right-hand window of square yellow house. Distant peak 211° 36′ 50″ true.
Plateali ..	38° 28′ 38″ N. 21° 6′ 54″ E.	Spot marked by a stone with X cut on it. On line of Western pier, and 327½ feet from inner end. Nearest corner of pink-coloured house, 166½ feet to the westward. Conspicuous tree, 43 feet to the eastward. Beacon on Vromona summit 216° 36′ 18″ true.
Zante	37° 46′ 41″ N. 20° 54′ 12″ E.	On beach just above high water mark; about 60 yards south-eastward of San Caralambo. Transits :— (1) Post about 180 yards from end of breakwater in line with → Cape Krionero lighthouse. (2) San Dionisio tower in line with → white church on side of hill.

INDEX TO NEW NAMES.

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